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# PeopleTools 8.54: Test Framework

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November 2016

PeopleTools 8.54: Test Framework

CDSKU

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# Preface

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## Understanding the PeopleSoft Online Help and PeopleBooks

The PeopleSoft Online Help is a website that enables you to view all help content for PeopleSoft Applications and PeopleTools. The help provides standard navigation and full-text searching, as well as context-sensitive online help for PeopleSoft users.

### PeopleSoft Hosted Documentation

You access the PeopleSoft Online Help on Oracle's PeopleSoft Hosted Documentation website, which enables you to access the full help website and context-sensitive help directly from an Oracle hosted server. The hosted documentation is updated on a regular schedule, ensuring that you have access to the most current documentation. This reduces the need to view separate documentation posts for application maintenance on My Oracle Support, because that documentation is now incorporated into the hosted website content. The Hosted Documentation website is available in English only.

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**Note:** Only the most current release of hosted documentation is updated regularly. After a new release is posted, previous releases remain available but are no longer updated.

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### Locally Installed Help

If your organization has firewall restrictions that prevent you from using the Hosted Documentation website, you can install the PeopleSoft Online Help locally. If you install the help locally, you have more control over which documents users can access and you can include links to your organization's custom documentation on help pages.

In addition, if you locally install the PeopleSoft Online Help, you can use any search engine for full-text searching. Your installation documentation includes instructions about how to set up Oracle Secure Enterprise Search for full-text searching.

See *PeopleTools Installation* for your database platform, "Installing PeopleSoft Online Help." If you do not use Secure Enterprise Search, see the documentation for your chosen search engine.

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**Note:** Before users can access the search engine on a locally installed help website, you must enable the Search portlet and link. Click the Help link on any page in the PeopleSoft Online Help for instructions.

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### Downloadable PeopleBook PDF Files

You can access downloadable PDF versions of the help content in the traditional PeopleBook format. The content in the PeopleBook PDFs is the same as the content in the PeopleSoft Online Help, but it has a different structure and it does not include the interactive navigation features that are available in the online help.

## Common Help Documentation

Common help documentation contains information that applies to multiple applications. The two main types of common help are:

- Application Fundamentals
- Using PeopleSoft Applications

Most product families provide a set of application fundamentals help topics that discuss essential information about the setup and design of your system. This information applies to many or all applications in the PeopleSoft product family. Whether you are implementing a single application, some combination of applications within the product family, or the entire product family, you should be familiar with the contents of the appropriate application fundamentals help. They provide the starting points for fundamental implementation tasks.

In addition, the *PeopleTools: Applications User's Guide* introduces you to the various elements of the PeopleSoft Pure Internet Architecture. It also explains how to use the navigational hierarchy, components, and pages to perform basic functions as you navigate through the system. While your application or implementation may differ, the topics in this user's guide provide general information about using PeopleSoft Applications.

## Field and Control Definitions

PeopleSoft documentation includes definitions for most fields and controls that appear on application pages. These definitions describe how to use a field or control, where populated values come from, the effects of selecting certain values, and so on. If a field or control is not defined, then it either requires no additional explanation or is documented in a common elements section earlier in the documentation. For example, the Date field rarely requires additional explanation and may not be defined in the documentation for some pages.

## Typographical Conventions

The following table describes the typographical conventions that are used in the online help.

<b><i>Typographical Convention</i></b>	<b><i>Description</i></b>
Key+Key	Indicates a key combination action. For example, a plus sign ( + ) between keys means that you must hold down the first key while you press the second key. For Alt+W, hold down the Alt key while you press the W key.
. . . (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe (   ).
[ ] (square brackets)	Indicate optional items in PeopleCode syntax.

<b><i>Typographical Convention</i></b>	<b><i>Description</i></b>
& (ampersand)	<p>When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object.</p> <p>Ampersands also precede all PeopleCode variables.</p>
⇒	<p>This continuation character has been inserted at the end of a line of code that has been wrapped at the page margin. The code should be viewed or entered as a single, continuous line of code without the continuation character.</p>

## ISO Country and Currency Codes

PeopleSoft Online Help topics use International Organization for Standardization (ISO) country and currency codes to identify country-specific information and monetary amounts.

ISO country codes may appear as country identifiers, and ISO currency codes may appear as currency identifiers in your PeopleSoft documentation. Reference to an ISO country code in your documentation does not imply that your application includes every ISO country code. The following example is a country-specific heading: "(FRA) Hiring an Employee."

The PeopleSoft Currency Code table (CURRENCY\_CD\_TBL) contains sample currency code data. The Currency Code table is based on ISO Standard 4217, "Codes for the representation of currencies," and also relies on ISO country codes in the Country table (COUNTRY\_TBL). The navigation to the pages where you maintain currency code and country information depends on which PeopleSoft applications you are using. To access the pages for maintaining the Currency Code and Country tables, consult the online help for your applications for more information.

## Region and Industry Identifiers

Information that applies only to a specific region or industry is preceded by a standard identifier in parentheses. This identifier typically appears at the beginning of a section heading, but it may also appear at the beginning of a note or other text.

Example of a region-specific heading: "(Latin America) Setting Up Depreciation"

### Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in the PeopleSoft Online Help:

- Asia Pacific
- Europe
- Latin America
- North America

## Industry Identifiers

Industries are identified by the industry name or by an abbreviation for that industry. The following industry identifiers may appear in the PeopleSoft Online Help:

- USF (U.S. Federal)
- E&G (Education and Government)

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## Using and Managing the PeopleSoft Online Help

Click the Help link in the universal navigation header of any page in the PeopleSoft Online Help to see information on the following topics:

- What's new in the PeopleSoft Online Help.
- PeopleSoft Online Help accessibility.
- Accessing, navigating, and searching the PeopleSoft Online Help.
- Managing a locally installed PeopleSoft Online Help website.

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## PeopleTools Related Links

[Oracle's PeopleSoft PeopleTools 8.54 Documentation Home Page \(Doc ID 1664613.1\)](#)

"PeopleTools Product/Feature PeopleBook Index" (PeopleTools 8.54: Getting Started with PeopleTools)

[PeopleSoft Information Portal](#)

[My Oracle Support](#)

[PeopleSoft Training from Oracle University](#)

[PeopleSoft Video Feature Overviews on YouTube](#)

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## Chapter 1

# Understanding PeopleSoft Test Framework

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## Understanding PeopleSoft Test Framework

PTF automates various tasks within the PeopleSoft application, primarily functional testing. Automating functional testing enables testers to execute more tests with greater accuracy during a shorter time.

PTF works by replicating the actions of a single user executing functional tests against the PeopleSoft browser-based application. Users can record manual test procedures and save them within the framework. Later (perhaps after an application upgrade or patch), those tests can be executed against the application to verify whether the application still behaves as expected. This method for capturing and executing tests is often called the *record and playback* approach to automation.

Test assets (tests and test cases) are stored in a database as Application Designer objects. As a result, test assets are PeopleTools-managed objects, which can be managed along with other PeopleTools-managed objects through PeopleSoft Lifecycle Management.

PTF includes a number of features not available in other commercially available record and playback automation tools, including:

- The ability to validate recorded objects against PeopleSoft object metadata definitions.

As a result, the tester is able to assertively verify the existence of test objects before running a test rather than running the test to identify invalid object definitions by trial and error.

See [Understanding Change Impacts](#).

- Features that help users manipulate data within the PeopleSoft rowset-oriented data structure.

See [Incorporating Scroll Handling](#).

- Functionality that automates numerous PeopleSoft-specific functions, such as running processes through Process Scheduler.

See [Process](#).

- Functionality that interfaces with other PeopleSoft automation tools, such as Data Mover and PsQuery.

See [Query](#).

See [DataMover](#).

You should be aware that PTF is not designed to:

- Validate certain types of information, such as image appearance and relative position of data and online objects. PTF is a functional test tool rather than a user interface or browser testing tool.
- Be a load testing tool; it replicates the experience of a single user running the application.

- Replicate certain types of user actions, such as drag-and-drop mouse actions.
- Recognize or validate certain types of objects you might find in third-party or external applications, such as Flash/Flex objects, data displayed in HTML regions, and so on. PTF is designed to validate objects in the PeopleSoft application.

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## Terminology

This table defines some PTF terms:

<b>Asset</b>	See Test Asset.
<b>Execution Options</b>	A list of application environments available to the tester. Execution options store application environment information such as URL, user ID, password, and Process Scheduler server, and information needed to run DataMover. PTF supplies this information to the test by default when a test does not explicitly specify such information.
<b>Explorer</b>	See PTF Explorer.
<b>Grid</b>	See Scroll.
<b>Hook</b>	Establish a connection between a PTF test and a PeopleSoft application browser.
<b>Library</b>	Similar to a test, a library contains one or more steps that together automate some discrete amount of test functionality. Unlike a test, a library is never executed by itself. Rather, libraries are meant to be called (sometimes repetitively) by tests.
<b>Log</b>	An object that saves the experience of a single test execution event. Logs report the success or failure of the test execution and include messages and screen shots to indicate where errors occurred.
<b>Log Manager</b>	A tool that enables PTF administrators to purge unneeded logs
<b>Maintenance</b>	The process of updating PTF tests and test cases to reflect object modifications present in upgrades or changes to the PeopleSoft application. This is done by way of a direct connection to the PeopleSoft metadata, not by executing the test. For example, if a field is renamed in an upgrade, the PTF maintenance process can warn the user that a test containing a reference to the old field name will likely fail to find the object by the old identification method. The maintenance process can help the user find the obsolete field reference and replace it with the valid (renamed) field reference before executing the test.

<b>Project</b>	A PeopleTools Application Designer project. Projects are the primary means for moving PTF Tests and Test Cases between databases.
<b>PTF Client</b>	An instance of the PTF executable program installed on an individual user's machine.
<b>PTF Environment</b>	An instance of a PeopleSoft application that has been configured to exchange data with one or more PTF clients, enabling clients to save and retrieve test assets from the application database.
<b>PTF Explorer</b>	A view of the PTF test assets stored within an application database. The system stores assets in a tree structure with collapsible folders for organizing the test assets. The pane containing the tree is the first pane visible to the user after startup and will always be the leftmost pane in the PTF user interface. It is labeled with the name of the application database.
<b>Recognition</b>	The means that the PTF client uses to identify (or find) HTML objects within the application. Often, this is the HTML ID property of the object.
<b>Recorder</b>	A feature of the PTF tool that is the primary means for creating new tests. While the Recorder is active, the PTF tool converts all of the user's manual test steps into steps that can be saved as an automated test.
<b>Screen Shot</b>	An image generated during test execution. A screen shot can be generated automatically by PTF to show the application window immediately after an error condition, or as a result of a step that uses the Log.Snapshot step.
<b>Scroll</b>	A scroll represents a rowset, which is a set of rows of data uniquely identified by one or more key fields. Rows in a scroll can contain child rowsets. Scrolls are rendered on PeopleSoft pages as grids of data or as a grouping of fields in a scroll area.
<b>Scroll Area</b>	See Scroll.
<b>Step</b>	The smallest unit of test functionality in PTF. A test will contain a number of steps. A step typically corresponds to a single manual test step or test instruction.
<b>Test Asset</b>	<p>An object used in PTF to automate a functional test. PTF test assets are saved in the application database and can be retrieved at any time to help automate tests. The five types of test assets are:</p> <ul style="list-style-type: none"><li>• Execution Options</li><li>• Libraries</li><li>• Logs</li><li>• Tests</li></ul>

- Test Cases

**Test**

The primary type of test asset in PTF. Tests contain steps that replicate the action of a tester executing a functional test against the PeopleSoft application.

**Test Case**

A set of data associated with a test corresponding to the values entered or verified in the application. For example, if a hire test hires three similar employees into the PeopleSoft system, a user might elect to record one test and to configure that test to call three test cases, one for each employee hired. A test can have multiple test cases associated with it.

**Test Editor**

A space within the PTF user interface where users can edit individual tests and test cases. The Test Editor displays a test as a series of steps presented as rows within the test. Users can open multiple Test Editor panes to edit multiple tests simultaneously.

**Variable**

A variable is a reference to a section of computer memory that can be used to store information that is subject to change or modification. PTF tests often use variables to store values that are not known until the test is executed. For example, you could use a variable to store an ID number generated by the PeopleSoft application during the test. Later in the test, the value of the variable could be manipulated, if necessary, and then used to set or validate other information within the PeopleSoft application.

## Chapter 2

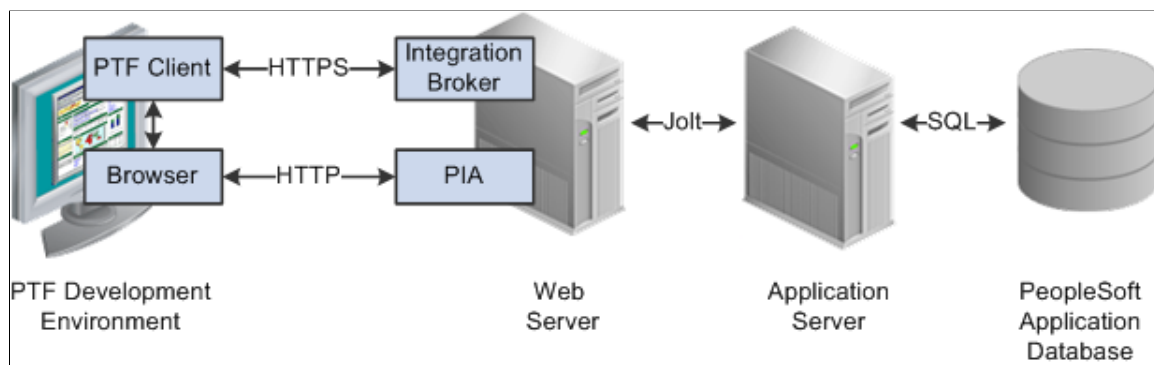
# Installing and Configuring PTF

## Understanding the PTF Development Environment

The following diagram illustrates the PeopleSoft Test Framework (PTF) development environment:

**Image: Diagram of the PTF development environment**

This diagram illustrates the PTF development environment.



A PTF development environment consists of the following elements:

- A PTF client instance.
- A connection to a PeopleSoft application database where test assets are stored.
- A Microsoft Internet Explorer browser instance.
- A connection to a PeopleSoft application that is to be tested.

The PTF client is a standalone program that runs on a Microsoft Windows workstation.

The PTF client connects to the PeopleSoft application database where test assets are stored using a secure HTTPS connection through Integration Broker Web Services.

The PTF client connects to the PeopleSoft application that is to be tested through a Microsoft Internet Explorer browser session. The browser connects to the PeopleSoft application using HTTP through the PeopleSoft Pure Internet Architecture (PIA).

**Note:** The PeopleSoft application database where test assets are stored and the PeopleSoft application that is to be tested are not required to be on the same database, but we strongly recommend you use the same database for both.

## Configuring an Environment for PTF

PTF test assets (tests and test cases) are stored in tables in a PeopleSoft application database.

Any application database that is certified to run on PeopleTools 8.51 or greater can be used as a PTF environment.

This section discusses how to:

1. Verify Integration Broker setup.
2. Set up security.
3. Configure the Web Profile.
4. Define PTF Configuration Options.

### Verifying Integration Broker Setup

To verify that Integration Broker is set up for your application:

1. In your PeopleSoft application, navigate to PeopleTools, Integration Broker, Configuration, Gateways.
2. Verify that the Gateway URL field references the correct machine name.
3. Click the Ping Gateway button.
4. Verify that the message returns a status of ACTIVE.
5. Click the Gateway Setup Properties link.
6. Sign on to access integrationGateway.properties file.
7. The default user ID is *administrator*, and the default password was created when PIA was installed (please contact your security administrator for the password).
8. Verify that the Gateway Default App Server URL is specified.

This is an example of the Gateways page:

#### Image: Integration Broker Gateways page

This example illustrates the fields and controls on the Integration Broker Gateways page.

The screenshot shows the 'Gateways' page in a web application. It features a title 'Gateways' in blue. Below the title, there are two radio buttons: 'Local Gateway' (which is selected with a green checkmark) and 'Load Balancer'. To the right of these buttons are two links: 'Inbound Gateways' and 'JMS Administration'. Below the radio buttons, there is a text field for 'URL' containing the value 'http://myserver.us.oracle.com:8010/PSIGW/PeopleSoftListeningConnect'. To the right of the URL field is a yellow button labeled 'Ping Gateway'. At the bottom left, there is a link 'Gateway Setup Properties' and a yellow button labeled 'Load Gateway Connectors'.



The port number in the URL (8010 in this example) is the http port of the web server.

This is an example of a Ping message showing ACTIVE status:

**Image: Integration Gateway Ping message**

This example illustrates a successful Integration Gateway Ping message.



Click the Gateway Setup Properties link on the Gateways page to access the PeopleSoft Node Configuration page, as shown in this example:

**Image: PeopleSoft Node Configuration page**

This example illustrates the fields and controls on the PeopleSoft Node Configuration page.

The image shows a screenshot of the "PeopleSoft Node Configuration" page. It includes a URL field with the value "http://SLC02QFL:8920/PSIGW/PeopleSoftListeningConnector". Below this is a section for "Gateway Default App. Server" with fields for App Server URL (//MYSERVER:9010), User ID (PTACMADMIN), Password (masked), Tools Release (8.54-810-R1), Domain Password (masked), and Virtual Server Node. Below this is a table for "PeopleSoft Nodes" with columns for Node Name, App Server URL, User ID, Password, Tools Release, Domain Password, and a Ping Node button. The table contains one row with Node Name "OE\_LOCAL", App Server URL "//MYSERVER:9211", User ID "PTACMADMIN", Password (masked), Tools Release "8.54-810-R1", Domain Password (masked), and a "Ping Node" button. At the bottom, there is a link for "Advanced Properties Page".

The port number in the App Server URL (9010 in this example) generally corresponds with the JSL Port Number as defined in the Application Server configuration. The default port number is 9000.

When the web server is connected to more than one database you will need to enter a node name, as defined in PeopleSoft Nodes on the PeopleSoft Node Configuration page, in the Node ID field of the PTF Signon dialog box. Contact your Integration Broker administrator to determine the correct node name to use. If no node is defined in PeopleSoft Nodes on this page, leave the Node ID field of the PTF Signon dialog blank.

See [Creating a Connection to a PTF Environment](#).

**Note:** If you rerun the PIA installer, the PeopleSoft Node Configuration page data is cleared and needs to be reentered.

Verify that the Default User ID for the ANONYMOUS node has, at a minimum, a PTF User role.

1. Navigate to Integration Broker, Integration Setup, Nodes.

2. Select the ANONYMOUS node.
3. Note the Default User ID.
4. Navigate to PeopleTools, Security, User Profiles, User Profiles.
5. Select the User ID you identified in Step 3.
6. Access the Roles tab.
7. Verify that one of the PTF roles is present.

See [Setting Up Security](#).

If Integration Broker is not set up correctly, contact your Integration Broker administrator.

See [Integration Broker Administration](#)

## Setting Up Security

Users connecting to a PTF test environment must have one of these roles associated with their user ID:

- PTF User
- PTF Editor
- PTF Administrator

This table details the privileges associated with the PTF security roles:

<b>Privilege</b>	<b>PTF User</b>	<b>PTF Editor</b>	<b>PTF Administrator</b>
Run Tests	Yes	Yes	Yes
Create, Modify, and Delete Tests	No*	Yes	Yes
Create, Modify, and Delete Test Cases	Yes	Yes	Yes
Create or Modify Execution Options	No	No	Yes
Use Log Manager	No	No	Yes
Define Configuration Options	No	No	Yes
Create Test Maintenance Reports	No	No	Yes
Create Test Coverage Reports	No	No	Yes
Insert Tests/Test Cases into Application Designer projects	No	No	Yes

\*PTF User can create, modify, and delete tests only in myFolder.

Modify Test includes these actions:

- Record tests.
- Add, modify, and delete test steps.
- Define and modify message recognition.
- Modify test properties.
- Add and modify test comments.
- Add and modify test step comments.
- Modify line information.

---

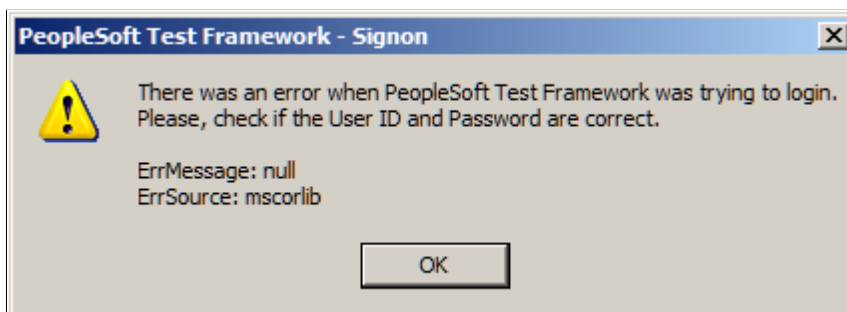
**Note:** The Default User ID for the ANONYMOUS node must have, as a minimum, a PTF User role.

---

If PTF security is not configured properly you may receive the following error when signing on the PTF client:

**Image: Signon error message**

This example illustrates a signon error message.



Possible causes and solutions for this error are:

- The user ID for the ANONYMOUS node does not have PTF privileges. Add at least the PTF User role to the user profile.
- The user ID you entered in the User field in the Environment Login does not have PTF privileges. Add at least the PTF User role to the user profile.

For more information on entering roles for a user profile, see "Working With User Profiles" (PeopleTools 8.54: Security Administration)

## Related Links

[Defining PTF Configuration Options](#)

[Creating Test Maintenance Reports](#)

[Creating Test Coverage Reports](#)

## Configuring the Web Profile

Configure the PeopleSoft application you are testing to generate HTML for testing.

1. Access the Web Profile Configuration page (PeopleTools, Web Profile, Web Profile Configuration).
2. Select the profile name for your environment. (This is the web profile that was selected during web server installation.)
3. Click the Debugging tab.
4. Check the Show Connection & Sys Info check box.

If this option is not selected PTF will not record menu, component, and page metadata correctly.

5. Check the Generate HTML for Testing check box.

If this option is not selected PTF will not record HTML objects correctly.

### Image: Web Profile Configuration - Debugging page

This example illustrates the fields and controls on the Web Profile Configuration - Debugging page.

General Security Virtual Addressing Cookie Rules Caching **Debugging** Look and Feel

Profile Name: DEV

- ☒ Trace Monitoring Server ?
- ☐ Trace PPM Agent ?
- ☒ Show Connection & Sys Info ?
- ☒ Show Trace Link at Signon ?
- ☐ Show Layout ?
- ☐ Show Overlapping Fields ?
- ☐ Show StyleSheet Inline HTML ?
- ☒ Generate HTML for Testing ?
- ☒ Write Dump File ?
- ☐ Create File from PIA HTML Page ?
- ☐ Use Unminified JavaScript ?

## Defining PTF Configuration Options

This section discusses the page used to configure PTF options.

### Defining Configuration Options

Use the Define Configuration Options page (PSPTTSTCONFIG) to:

- Define record and execution options.

- Configure external command processing.

## Navigation

PeopleTools, Lifecycle Tools, Test Framework, Define Configuration Options

## Image: Define Configuration Options Page

This example illustrates the fields and controls on the Define Configuration Options Page.

**Configuration Options**

**Define Configuration Options**

Configuration Options

☒ Allow Untrusted SSL

**Record Options**

☒ Use Page.Prompt    ☒ Use Process.Run    ☒ Use Page.Expand

☒ Use Message Recognition    ☒ Use Scroll Variables    ☒ Use Browser.Start\_Login

**Execution Options**

**Process Server List** Find | View All First 1 of 1 Last

Server Name
PSNT

**External Command Processing**

**Command List** Find | View All First 1-2 of 2 Last

*Command Name	*Command Path	*Command File Name	Timeout (Seconds)
FILEKILL	\\ServerName\Labs\Commands	FILEKILL.BAT	3600
FILECHECK	\\ServerName\Labs\Commands	FILECHECK.BAT	3600

## Configuration Options

### Allow Untrusted SSL

This field is unavailable for entry. By default, PTF requires a secure connection to the database.

When a user starts the PTF client, if the database that PTF is attempting to connect to does not have a valid SSL certificate, an error message appears, indicating that the environment does not allow unsecured connections. Users should check with their PTF Administrator to resolve the error.

PTF Administrators can activate the PTTST\_CONFIG\_NO\_SSL web service if a connection to an unsecured database is allowed. Once the web service is active, when a user starts the PTF client and PTF attempts to connect to an unsecured database, a warning message appears indicating that the connection is unsecure, but it provides an option to connect anyway.

To activate the PTTST\_CONFIG\_NO\_SSL web service:

1. In PIA, access the Service Operations – Search page by selecting PeopleTools, Integration Broker, Integration Setup, Service Operations.

2. In the Service Operations field, enter *PTTST\_CONFIG\_NO\_SSL* and click the Search button.
3. In the Service Operations search results, click the PTTST\_CONFIG\_NO\_SSL link to access the Service Operations – General page.
4. Select the Regenerate Any-to-Local check box.
5. Select the Active check box to activate the service operation, then click the Save button.

## Record Options

### Use Page Prompt

Select to use Page Prompt and PromptOK steps during recording in place of menu navigation. The Use Page Prompt option is also available on the PTF Test Recorder toolbar.

The option selected here is the default for all users in this environment. The option selected on the PTF Test Recorder toolbar overrides this selection for that recording session.

See [Page](#).

### Use Message Recognition

Select to automatically create entries for the Message Recognition feature during recording. The Use Message Recognition option is also available on the PTF Test Recorder toolbar. The option selected here is the default for all users in this environment. The option selected on the PTF Test Recorder toolbar overrides this selection for that recording session.

### Use Process Run

Select to use Process Run steps during recording in place of menu navigation. The Use Process Run option is also available on the PTF Recorder toolbar. The option selected here is the default for all users in this environment. The option selected on the PTF Test Recorder toolbar overrides this selection for that recording session. When this option is selected, PTF will recognize when a user accesses a run page and will populate the Process.Run parameters with the process information. All actions in the run page or process monitor page will be ignored, because those action will be handled by the Run.Process in execution.

### Use Scroll Variables

Select to enable selection of scroll variables during recording. The Use Scroll Variables option is also available on the PTF Test Recorder toolbar. The option selected here is the default for all users in this environment. The option selected on the PTF Test Recorder toolbar overrides this selection for that recording session.

When this option is selected, a drop-down list box containing valid scroll variables appears in the PTF Test Recorder tool bar.

While recording, when the user selects any available variable from the Variable list, *in subsequent recording actions*, the

PTF Recorder appends the variable to the name/ID/comment recognition string in the test.

### Use Page Expand

Select to add a Page.Expand step type if the user expands a section of a page during recording. The Use Page Expand option is also available on the PTF Test Recorder toolbar. The option selected here is the default for all users in this environment. The option selected on the PTF Test Recorder toolbar overrides this selection for that recording session.

If this option is selected, when a user expands a page section, two steps are inserted:

1. A Page.Expand step, which is set to active.
2. The specific action used to expand the page, which is set to inactive.

When this option is not selected, when a user expands a page section, a step for only the specific user action is inserted.

### Use Browser.Start\_Login

Select this option to set the first step in a test to Browser.Start\_Login. When this option is selected, the Ignore Login Page option on the PTF Test Recorder tool bar is selected by default.

When this option is not selected, the first step in a test is set to Browser.Start, and the Ignore Login Page option on the PTF Test Recorder tool bar is not selected, so any immediately subsequent recorded login steps are active.

The option selected here is the default for all users in this environment.

## Execution Options

### Process Server List

Add process server names to the list that can be selected in Execution Options.

See [Configuring Execution Options in PTF Client](#).

## External Command Processing

Use this section to define the command line programs available to PTF users within any given PTF environment. When the step/action Command.Exec is defined in the test step, PTF will use the information supplied to run the command.

---

**Note:** Automation engineers may develop many executable utilities that assist in automating functional test cases. In order to limit the scope of command line programs available to PTF users within any given PTF environment, the command line program must be defined in the PeopleSoft database.

---

<b>Command Name</b>	Enter the name to be used in PTF for the command line program. The command name will be all caps.
<b>Command Path</b>	Enter the path where the command line program is located. <hr/> <b>Note:</b> the path to the defined external command and the executable file must be located on the application server hosting PIA for the PTF database. <hr/>
<b>Command File Name</b>	Enter the name of the command line file.
<b>Timeout</b>	Enter the time in seconds before a command will time out.
See <a href="#">Command</a> .	

---

## Installing a PTF Client

A PTF client is an installation of the PTF executable software on an individual user's machine. It is the program that users run in order to create and execute automated tests. PTF test assets are not saved to the client machine. Rather, they are saved to an application database environment configured to exchange information with the PTF client. A PTF client does not need to be, and usually is not, installed on the same machine that hosts the PeopleSoft application environment.

This section discusses how to:

1. Verify requirements.
2. Configure the browser settings.
3. Install PTF client software.
4. Create a connection to a PTF environment.
5. Select a PTF environment.
6. Configure local options.

## Verifying Requirements

PTF client installation has the following requirements:

1. Microsoft Windows operating system.

---

**Note:** PTF requires a 64 Bit OS environment.

---

2. Microsoft Internet Explorer.

PTF does not support any browsers other than Microsoft Internet Explorer.

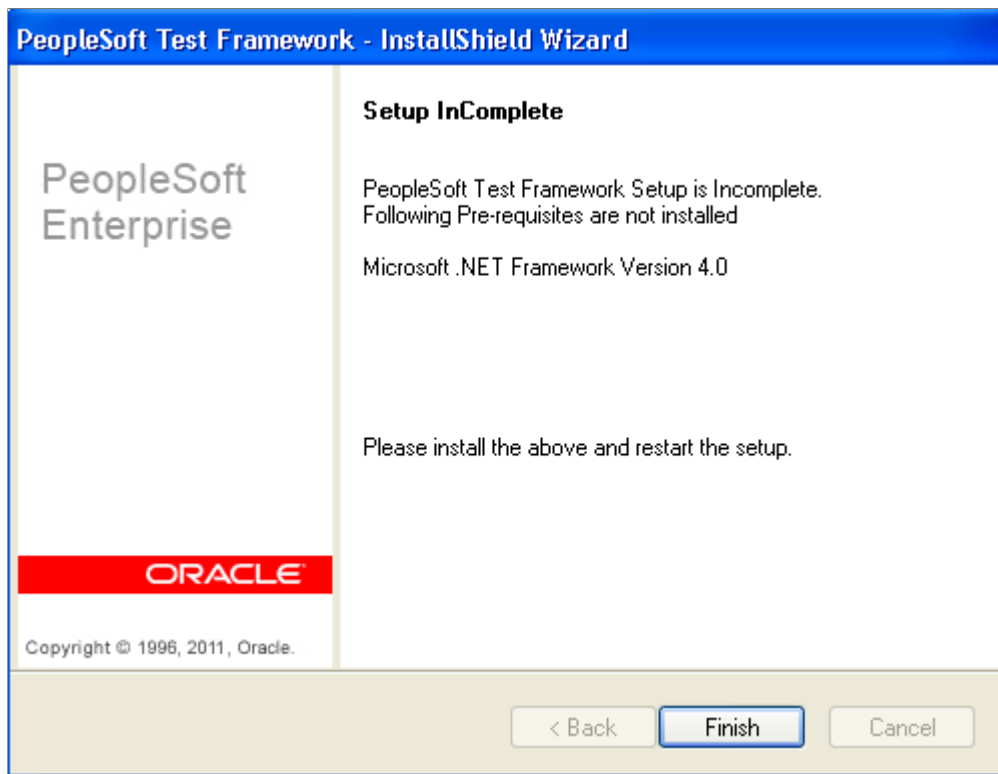
3. Microsoft .NET Framework v4.0.



If Microsoft .NET Framework v4.0 is not present, the PTF Installer returns the following error during installation:

**Image: Microsoft .NET Framework error message**

This example illustrates the message received when Microsoft .NET Framework Version 4.0 is not present in the environment.



4. In order to install PTF, you will need read and write access to the PTF home directory (C:\Program Files\PeopleSoft\PeopleSoft Test Framework) by default.
5. PTF will need runtime access to the PTF data directory (C:\Documents and Settings \<User>\ApplicationData\PeopleSoft\PeopleSoft Test Framework) by default.

---

**Note:** When using a dual monitor system, PTF must be run in the primary display.

---

## Configuring the Browser Settings

You must configure the client browser security settings to accept the test application URL.

If browser security settings are not properly configured you may encounter problems with PTF test playback.

To configure the browser security settings:

1. In Microsoft Internet Explorer, select Tools, Internet Options.
2. In the Internet Options dialog box, access the Security tab.

3. Click the Local intranet zone.
4. Click the Sites button.
5. Click the Advanced button.
6. In the Add this website to the zone field, enter the domains for the test applications.
7. Add entries for both http and https.

For example:

```
http://*.<domain_name>  
https://*.<domain_name>
```

Determine the domain name based on the URL for the test application. For example, if the URL is:

```
http://myserver.us.oracle.com:80/PTTRN/signon.html
```

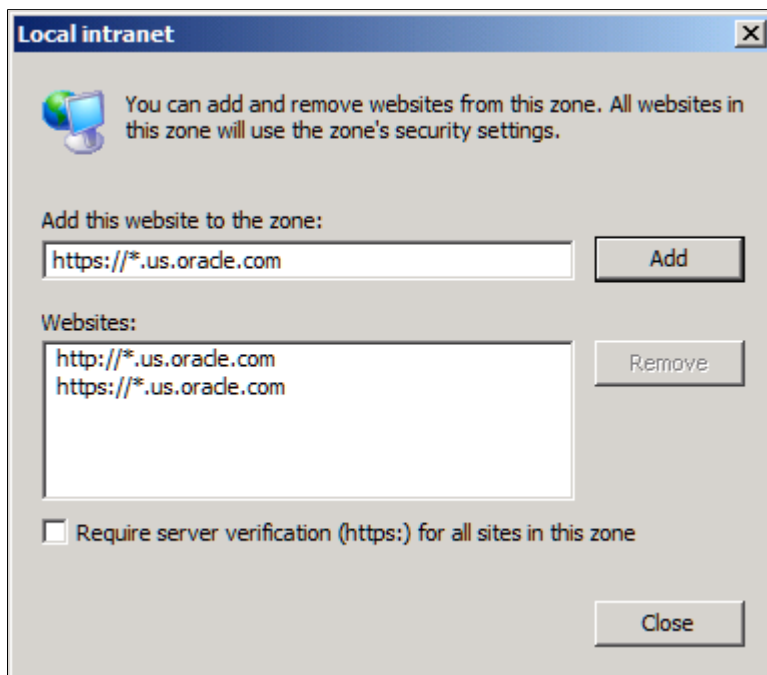
then the domain name is `us.oracle.com`

8. Click the Add button.
9. Click the Close button.
10. Click the OK button to close each open dialog box.

This example shows the Local intranet dialog box:

#### Image: Microsoft Internet Explorer Local intranet dialog box

This example illustrates the Microsoft Internet Explorer Local intranet dialog box



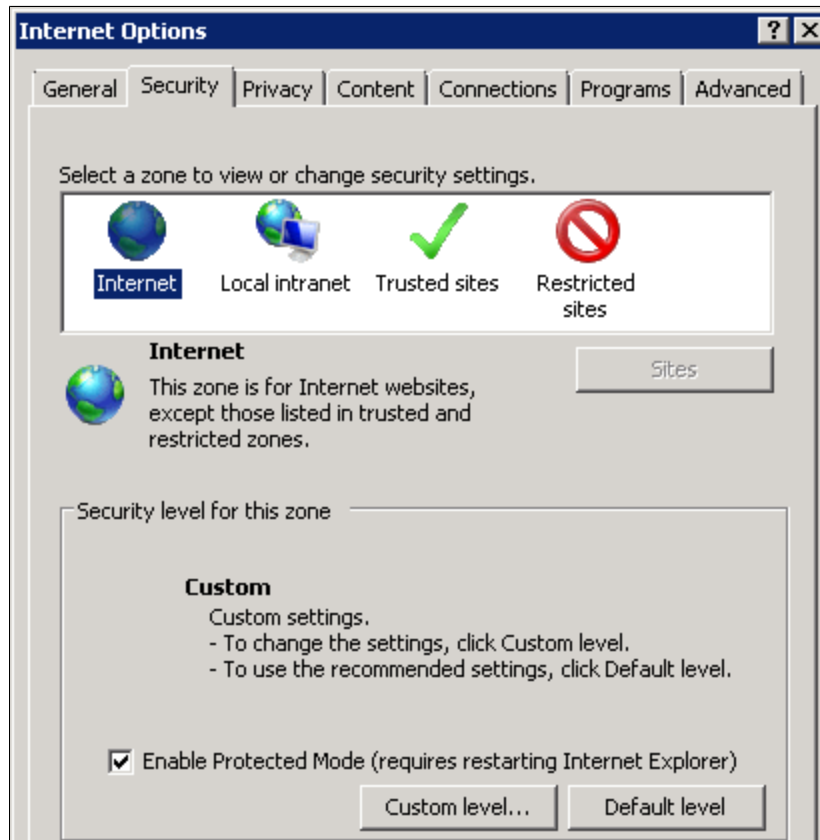
#### Protected Mode

For Internet Explorer 10 or higher, Enable Protected Mode should be set on.

In Microsoft Internet Explorer select Tools, Internet Options, Security, select the Internet zone, and select Enable protected Mode

### Image: Enable Protected Mode on

This example illustrates setting Enable Protected Mode on.



### Zoom Settings

Browser zoom settings should be set to 100 percent. Check the lower right-hand corner of the browser and make sure it displays 100% for the zoom level.

## Installing PTF Client Software

**Note:** Beginning with PeopleSoft PeopleTools 8.54-25, the name of the installation executable has been changed from setup.exe to installTestFramework.exe.

When removing or installing the PTF Client, use *PS\_HOME/setup/PsTestFramework/installTestFramework.exe*.

The following options are available for installing the PTF Client:

- Installing using an executable file.
- Installing (or uninstalling) from the command line (also referred to as a silent installation).

## Installing Using an Executable File

To install the PTF client software using an executable file::

1. In Windows Explorer, navigate to the setup.exe executable.

If you are installing on a machine that has a PeopleTools 8.51 or later installation, setup.exe is located in the <PS\_HOME>\setup\PsTestFramework directory.

If you are installing PTF client on another machine, the path will be \\<machine\_name>\<PS\_HOME>\setup\PsTestFramework. Your network administrator will need to make the directory accessible to users.

2. Run setup.exe.

The installation wizard appears.

3. Click the Next button.

4. You are prompted to select a folder where the wizard will install files. The default location is C:\Program Files\PeopleSoft\PeopleSoft Test Framework.

You can accept the default location or click the Browse button to select a different location.

5. Click the Next button.

The Ready to Install the Program page appears.

6. Click the Install button.

The InstallShield Wizard Complete page appears.

7. Click the Finish button to dismiss the install wizard.

Your PTF client software installation is complete.

8. To verify your installation, do any of the following:

- Locate the PTF shortcut on your desktop.
- Navigate to Start, All Programs, PeopleSoft Test Framework.
- In Windows Explorer, navigate to C:\Program Files\PeopleSoft\PeopleSoft Test Framework (or the installation directory you specified in Step 4).

## Installing/Uninstalling from the Command Line

To install the PTF client software from the command line:

1. In Windows Explorer, navigate to the setup.exe file.

If you are installing on a machine that has a PeopleTools 8.51 or later installation, setup.exe is located in the <PS\_HOME>\setup\PsTestFramework directory.

If you are installing PTF client on another machine, the path will be \\<machine\_name>\<PS\_HOME>\setup\PsTestFramework. Your network administrator will need to make the directory accessible to users.

2. Enter the following command from the command line:

```
setup.exe /s /f1"%PS_HOME%\setup\PsTestFramework\response-file.txt"
```

---

**Note:** Replace %PS\_HOME% with the actual PS\_HOME, or set the PS\_HOME environment variable in the command window.

---

To uninstall from the PTF client software from the command line:, enter the following command from the command line:

```
setup.exe /s /f1"%PS_HOME%\setup\PsTestFramework\uninstall-silent-response.txt"
```

To uninstall an existing PTF instance *and* install a new instance of PTF enter the following command from the command line:

```
setup.bat
```

## Creating a Connection to a PTF Environment

To create a connection to a PTF environment:

1. Run the PTF client.

Either double-click the PTF shortcut on your desktop or navigate to Start, All Programs, PeopleSoft Test Framework.

2. The PeopleSoft Test Framework - Signon dialog box appears. If you have not yet created a connection to a PTF environment, the environment signon dialog box is empty and the fields are disabled.
3. Click the New button.

Enter details for the following fields:

### Database Name

Enter a descriptive name for this environment. You can use any name.

### Server:Port

Enter the server name and port for the environment.  
Contact your Integration Broker administrator or system administrator for the correct values.

The format for the Server:Port field is:

```
<machine_name>:<https_port>
```

For example:

```
myserver.us.oracle.com:443
```

If the https port is the default 443 the port is optional.

You can also enter a complete https URL in this format:

```
https://<machine_name>:<https_port>/PSIGW/HttpListeningConnector
```

For example:

```
https://myserver.us.oracle.com:443/PSIGW/
HttpListeningConnector
```

### Use Proxy

Select this field if using a proxy server.

When you select this check box the Proxy Information link is enabled.

### Proxy Information

Click this link to enter details for the proxy server.

Enter the following information for the proxy server:

- Server: Enter the server name
- Port: Enter the server port.
- User: Enter the user ID for the proxy server.

If you use network authentication, use the DOMAIN \USER format.

- Password: Enter the password.

### Node ID

This field is required if more than one database is connected to the server. Enter the name of the PeopleSoft node with which the integration gateway is to communicate.

Contact your Integration Broker administrator or system administrator for the correct values.

See [Verifying Integration Broker Setup](#).

### User

Enter a valid user ID for the PeopleSoft application that contains the environment. The user ID must have one of the PTF security roles assigned. Contact your security administrator to add the role if required.

If this user ID does not have PTF access you will receive a signon error:

See [Setting Up Security](#).

### Password

Enter the password for this user.

4. Click the OK button.

PTF launches with a connection to the designated environment.

The following example shows a completed PeopleSoft Test Framework - Signon dialog box. In this example the Node ID field is left blank because the default gateway is used.

**Image: Example of a Completed Environment Signon Dialog Box**

This example illustrates a completed environment signon dialog box.

PeopleSoft Test Framework - Signon

ORACLE PeopleTools 8.53

Database Name : DEMO

Server:Port : myserver.us.oracle.com:8930

☐ Use Proxy Proxy Information

Node ID :

User ID : PTFDEMO

Password :

OK Cancel New Previous

This example shows a completed PeopleSoft Test Framework - Signon dialog box where the default gateway is not used, which requires a Node ID to be specified:

**Image: Example of a Completed Environment Signon Dialog Box with Node ID Specified**

This example shows a completed PeopleSoft Test Framework - Signon dialog box where the default gateway is not used, which requires a Node ID to be specified.

PeopleSoft Test Framework - Signon

ORACLE PeopleTools 8.53

Database Name : PBDEMO

Server:Port : server1.us.oracle.com:443

☐ Use Proxy Proxy Information

Node ID : PB\_LOCAL

User ID : QEDMO

Password :

OK Cancel New Previous

**Note:** Contact your Integration Broker administrator to determine the correct value to use for the Node ID field.

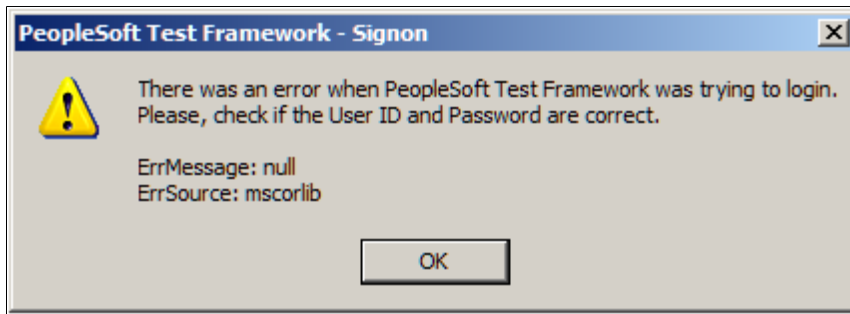
## Troubleshooting Tips

This section shows some of the errors you might encounter when attempting to signon to PTF and suggests possible solutions.

You will receive the following signon error if PTF security has not been configured correctly:

### Image: Signon ErrorMessage

This example illustrates a Signon error message when PTF security has not been configured correctly.



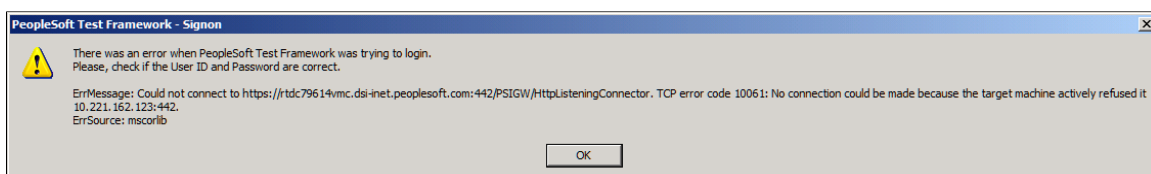
Possible causes and solutions for this error are:

- The user ID and password you entered are not valid for the PeopleSoft application corresponding to the entry in the Server:Port field.
- The user ID you entered in the User field in the Environment Login does not have PTF privileges. Add at least the PTF User role to the user profile.
- The user ID for the ANONYMOUS node does not have PTF privileges. Add at least the PTF User role to the user profile.

You will receive the following error message if you specified the wrong HTTPS port in the environment login URL:

### Image: Wrong HTTPS Error Message

This example illustrates the error message received when the wrong HTTPS is entered.



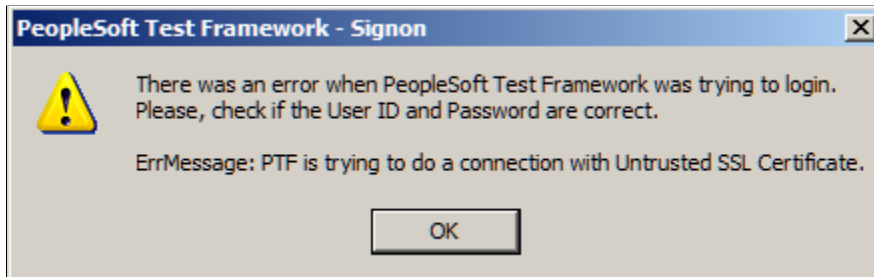
The default port is 443. If a different port was specified during installation, you will need to contact your system administrator to determine the correct port number.



If you receive the following error message, select Allow Untrusted SSL on the Configuration Options page.

**Image: Untrusted SSL Certificate Error Message**

This example illustrates the error message received when Untrusted SSL Certificate has not been selected and no certificate has been installed.



See [Defining PTF Configuration Options](#).

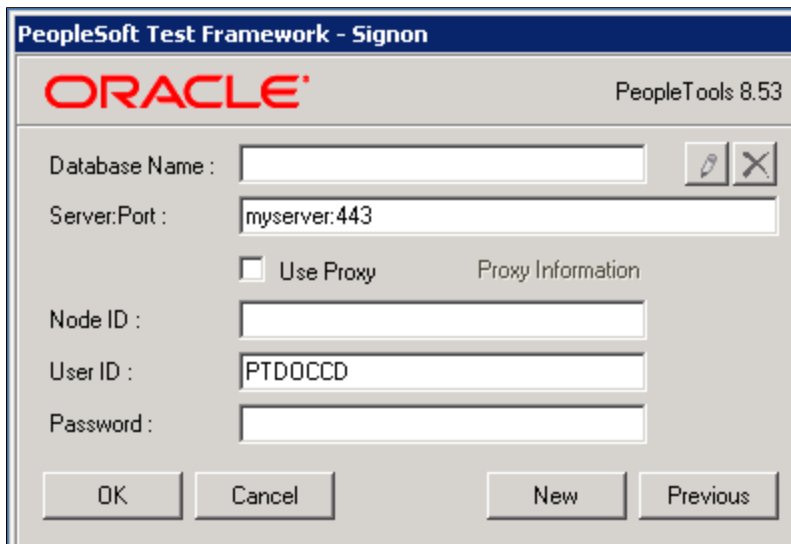
## Selecting a PTF Environment

When you launch PTF again, the PeopleSoft Test Framework - Signon dialog box appears, with the last environment you used automatically selected.

You can enter the password and click the OK button to launch PTF using that environment, or you can click the New button to create another environment login.

**Image: New PeopleSoft Test Framework - Signon Dialog Box**

This example illustrates the dialog box for creating a new PTF environment login.

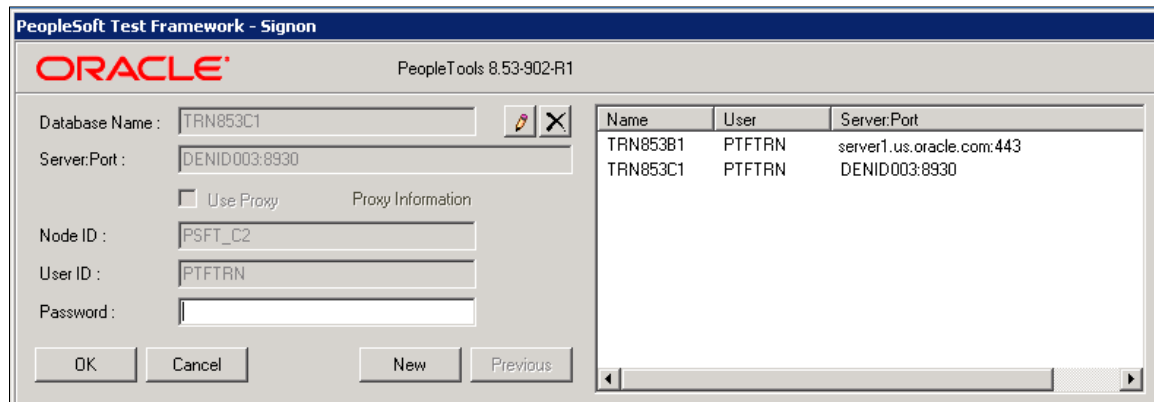


If you have created other environment signons, click the Previous button to select another environment signon.

Click the Edit button to edit the currently selected environment signon.

**Image: Example of PeopleSoft Test Framework - Signon dialog box showing previously used test environments**

This example illustrates the PeopleSoft Test Framework - Signon dialog box showing previously used test environments.



Environment signon settings are specific to the machine on which the PTF client is installed. The environment signon settings are stored in the environments.xml file in the PTF data directory (C:\Documents and Settings\<User>\Application Data\PeopleSoft\PeopleSoft Test Framework) by default.

---

**Note:** The environment password is not stored in the environments.xml file.

---

## Configuring Local Options

Select Local Options from the PTF menu to access the Local Options dialog box. Use Local Options to configure timeouts for processes launched from a PTF test.

Local options are specific to the machine on which the PTF client is installed. The local options settings are stored in the localoptions.xml file in the PTF data directory (C:\Documents and Settings\<User>\Application Data\PeopleSoft\PeopleSoft Test Framework) by default.

**Note:** Changes made to the Local options settings will take affect the next time PTF client is opened or after a PTF test suite refresh.

### Image: Local Options Dialog Box

This example illustrates the fields and controls on the Local Options dialog box. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Local Options' dialog box with the following settings:

- Process Run Options:**
  - Queued: Timeout (min.) = 1, Log Result = LogWarning
  - Posting: Timeout (min.) = 1, Log Result = LogWarning
  - Processing: Timeout (min.) = 60
- Query Options:**
  - Output Folder = C:\Temp
  - Output Format = XLS
- Test Options:**
  - Grid: Show Field Label = Tooltip
  - Grid: Show Comment = Tooltip
  - Auto-Check Syntax = No
- Recorder Options:**
  - File.Download: prompt for path = No

### Process Run Options

#### Queued: Timeout (min)

Enter the time in minutes for a process to be queued before PTF logs a warning or a fail message.

#### Queued: Log Result

Specify whether a timeout causes PTF to log a warning or a fail message. If LogFail is selected and Stop on Error is set in the Debug menu, then execution will stop if a timeout occurs.

#### Posting: Timeout (min)

Enter the time in minutes for a process to post before PTF logs a warning or a fail message.

#### Posting: Log Result

Specify whether a timeout causes PTF to log a warning or a fail message. If LogFail is selected and Stop on Error is set in the Debug menu, then execution will stop if a timeout occurs.

#### Processing: Timeout (min.)

Enter the time in minutes for a process to complete before PTF logs a warning or a fail message.

## Query Options

<b>Output Folder</b>	Enter or browse to the path to use for query output.
<b>Output Format</b>	Select the file format to use for query output. Options are: <i>CSV</i> , <i>XLS</i> , or <i>XML</i> .

## Test Options

<b>Grid: Show Field Label</b>	Select <i>Tooltip</i> to show field labels as tooltips (hover text). Select <i>Column</i> to show field labels in a column in the test window.
<b>Grid: Show Comment</b>	Select <i>Tooltip</i> to show step comments as tooltips (hover text).
<b>Auto-Check Syntax</b>	Select <i>Yes</i> to be prompted to check syntax every time you save a test.

## Recorder Options

<b>File.Download: prompt for path</b>	Select <i>Yes</i> to be prompted to specify the path to use for file downloads when executing tests.
---------------------------------------	--

---

# Configuring Execution Options in PTF Client

You use execution options to configure settings for the PeopleSoft applications that you test with PTF. Execution options are stored as part of the metadata for a PTF environment and are available to all users of that environment. Only a PTF administrator (a user with the PTF Administrator role) is able to insert, delete, or modify execution options. You can configure execution options either in the PTF client, or by using the Define Execution Options component in the PeopleSoft Internet Architecture.

This section describes how to configure execution options in the PTF Client. For information about defining execution options in PIA, see [Configuring Execution Options in PeopleSoft Internet Architecture](#)

---

**Note:** Because test assets are PeopleTools-managed objects, we strongly recommend that you run tests only against the database on which they are stored. As part of the PTF maintenance process, PTF synchronizes test definitions with application metadata definitions. If tests are run against a different application database, you may encounter problems when an application is customized or upgraded. A PTF administrator can limit execution options to environments running against the same database where test assets are stored.

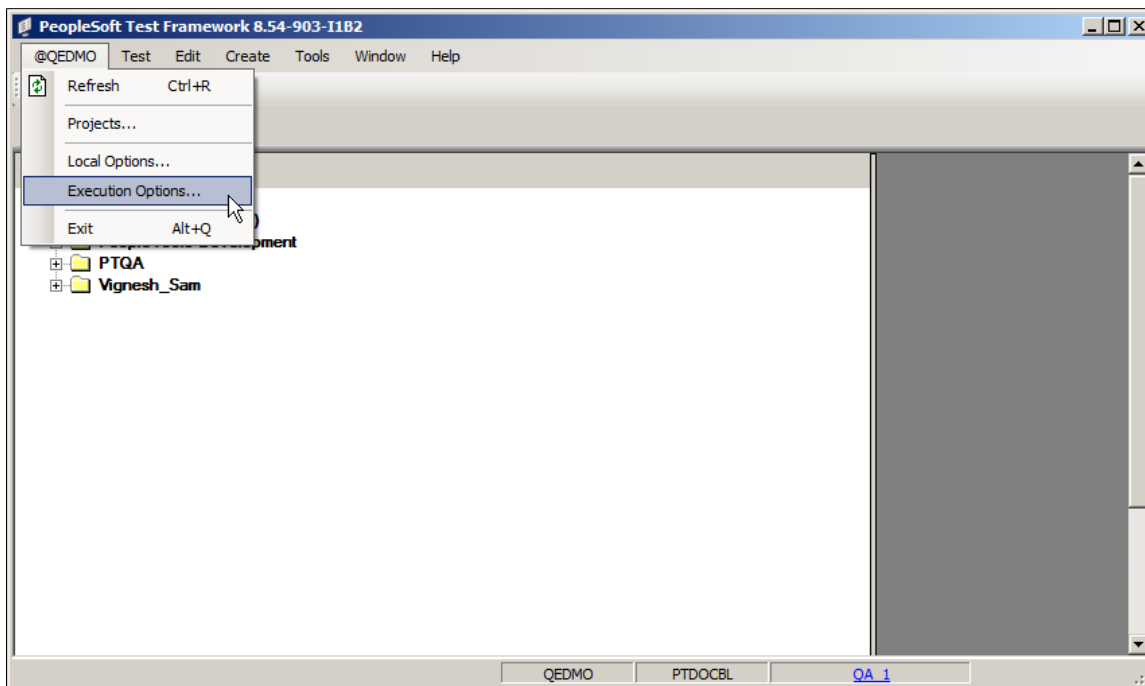
---

To establish execution options in the PTF client, access the Execution Options dialog (select *<PTF menu>*, Execution Options). The PTF menu is labeled with the name of the current PTF environment, preceded by an @ character, such as @QEDMO, for example. You can also access the Execution Options dialog box by clicking the execution options link in the lower right corner of the PTF application window.

The execution options link is labeled with the name of the default execution option. In the following example, the execution options link is QA\_1.

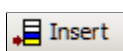
### Image: Execution Options menu

This example shows how to access the Execution Options dialog in the PTF Client using the PTF menu.



The currently defined execution options appear on the left pane of the Execution Options dialog. The settings for the selected execution option appear in the right pane.

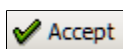
The following toolbar buttons are available:



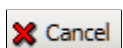
Click to add a new execution option.



Click to remove an execution option from the list.



Click to save changes and close the dialog box.



Click to close the dialog box without saving changes.

## Options Tab

Use the Options tab to define the application settings and log output options to use during PTF test execution.

### Image: Execution Options dialog – Options tab

This example illustrates the fields and controls on the Execution Options dialog – Options tab. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Execution Options' dialog box with the 'Options' tab selected. On the left, a list contains 'QA\_1' under the 'Standard' category. The main area contains the following fields:

- Name:** QA\_1
- Prompt for Options:** No
- Application:**
  - URL:** http://myserver.us.oracle.com:8010/PSAPP/signon.html
  - User ID:** QAMGR
  - Password:** masked with dots
- Process Server:** PSNT
- Date Format:** MM/DD/YYYY
- Skip Language:** No
- Form Factor:** None
- Output:**
  - LogFolder:** QATESTS
  - Verbose:** Yes

The following fields are on the Options tab:

<b>Name</b>	Enter a name for this execution option.
<b>Prompt for Options</b>	Specify whether the Execution Options dialog appears when a user executes a test.
<b>URL</b>	Enter the URL for the PeopleSoft application to be tested.
<b>User ID</b>	Enter a valid user ID for the application database.
<b>Password</b>	Enter the login password for the user.
<b>Process Server</b>	Select a process server from the drop-down list. This list is populated by the Process Server List field in the Configuration Options page.

See [Defining Configuration Options](#).

**Date Format**

Select a date format.

**Skip Language**

Select *Yes* to bypass the language selection on the PIA login page during `browser.start_login`.

**Form Factor**

Select the Form Factor size to use on the PIA login page during `browser.start_login`.

At text execution, the form size that you specify is selected on the login page, and a new browser instance will open using that size. The test will continue to execute in the new browser instance.

**LogFolder**

Select or enter the folder name to which logs will be written. If the folder does not exist it will be created.

**Verbose**

Specify whether to use verbose logging.

Select *Yes* to log a detail line in the log for each step executed in the test.

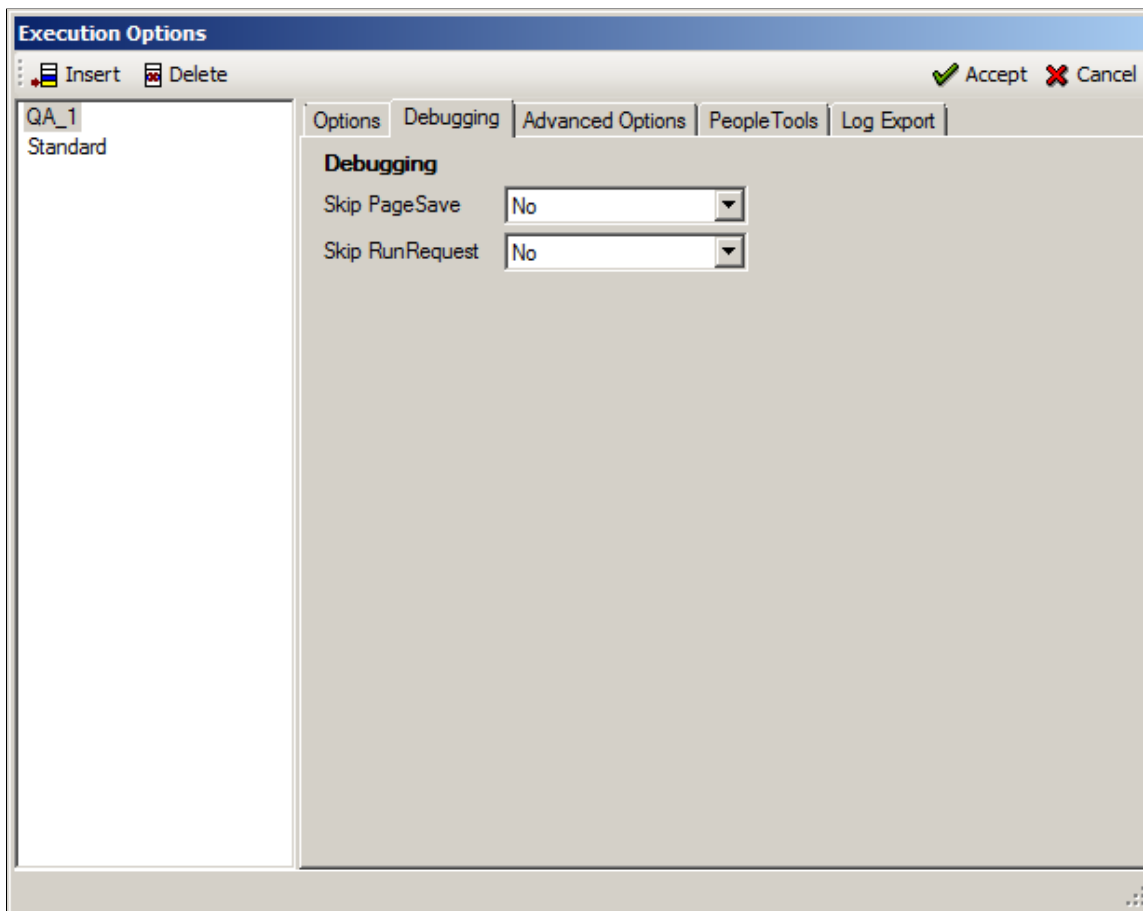
Select *No* to log only the test rollup status (Pass or Fail) at the test level and to log a detail line for failed steps.

## Debugging Tab

Use the Debugging tab to specify how PTF should manage page saves and run requests during test execution.

### Image: Execution Options dialog – Debugging tab

This example illustrates the fields and controls on the Execution Options dialog - Debugging tab. You can find definitions for the fields and controls later on this page.



The following fields are on the Debugging tab:

#### **Skip PageSave**

Select *Yes* to prevent a test from executing a save. You would, for instance, select this option to avoid duplicate values in the application database if you plan to run a test repeatedly.

#### **Skip RunRequest**

Select *Yes* to prevent the test from executing process requests.

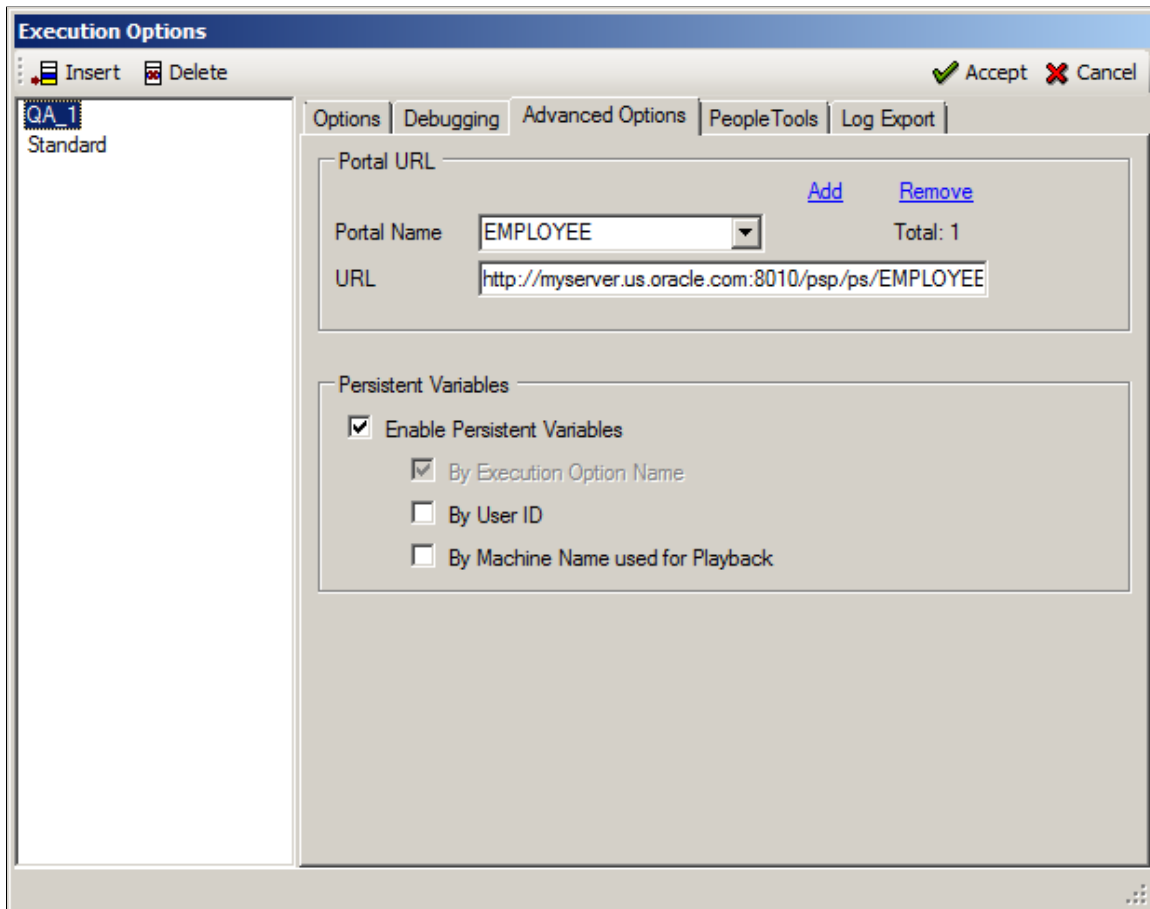


## Advanced Options Tab

Use the Advanced Options tab to specify the information required to connect to multiple portal URLs and to enable persistent variables.

### Image: Execution Options dialog – Advanced Options tab

This example illustrates the fields and controls on the Execution Options dialog – Advanced Options tab. You can find definitions for the fields and controls later on this page.



The Portal URL is used to access the component when there is a step in the test to set the browser URL (Browser.Set\_URL). See [Set\\_URL](#). To add a portal URL, click the Add link. To remove a portal URL click the Remove link.

The following fields are on the Advanced Options tab:

#### Portal Name

Enter a valid portal name or select from a list of previously added portal names.

---

**Note:** The name is saved in upper case.

---

#### URL

Enter the portal URL.

The portal URL is entered in the following format:

`http://webserver/psp/domain/portalname/node`

For example: `http://myserver.us.oracle.com:8010/psp/ps/EMPLOYEE/QE_LOCAL/`

---

**Note:** The ending backslash / is optional

---

**Enable Persistent Variables**

Select to enable saving and using persistent variables. Selecting this option enables the other fields in this group.

See [Using Persistent Variables](#)

**By Execution Option Name**

This option is automatically selected when you select the Enable Persistent Variables check box. Persistent variables are stored in the database keyed by execution option name. Persistent variables can also be keyed by User ID, machine name or both.

**By User ID**

Select to store and retrieve persistent variables by PTF user ID.

**By Machine Name Used for Playback** Select to store and retrieve persistent variables by machine name.

## PeopleTools Tab

Use the PeopleTools tab to provide the information required to connect to DataMover.

### Image: Execution Options dialog – PeopleTools tab

This example illustrates the fields and controls on the Execution Options dialog – PeopleTools tab. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Execution Options' dialog box with the 'PeopleTools' tab selected. The dialog has a left pane with 'QA\_1' and 'Standard' listed. The right pane contains the following fields:

- Tools Path (PsHome)**: Text field with value 'D:\PT854'
- Connection Type**: Dropdown menu with 'ORACLE' selected
- Server Name**: Empty text field
- Database Name**: Text field with value 'DEMO'
- User ID**: Text field with value 'QEDMO'
- Password**: Password field with masked characters '•••••'
- Data Mover** section:
  - DMS Input Path**: Text field with value 'D:\PT854\Data'
  - DMS Output Path**: Text field with value 'D:\PT854\Data'
  - DMS Working Path**: Text field with value 'D:\PT854\Temp\DataMover'

At the top right of the dialog are 'Accept' (green checkmark) and 'Cancel' (red X) buttons. The tabs at the top are 'Options', 'Debugging', 'Advanced Options', 'PeopleTools' (selected), and 'Log Export'.

The following fields are on the PeopleTools tab:

**Tools Path (PsHome)** Enter the path to PS\_HOME for this environment.

**Connection Type** Select the connection type.

**Server Name** Enter the name of the database server.

The Server Name field is enabled for only Sybase and Informix platforms.

**Database Name** Enter the name of the database for this environment.

**User ID** Enter a valid database user ID.

**Password** Enter the password for this user.

**DMS Input Path** Enter the DataMover input path.

**DMS Output Path**

Enter the DataMover output path.

**DMS Working Path**

Enter the DataMover working path.

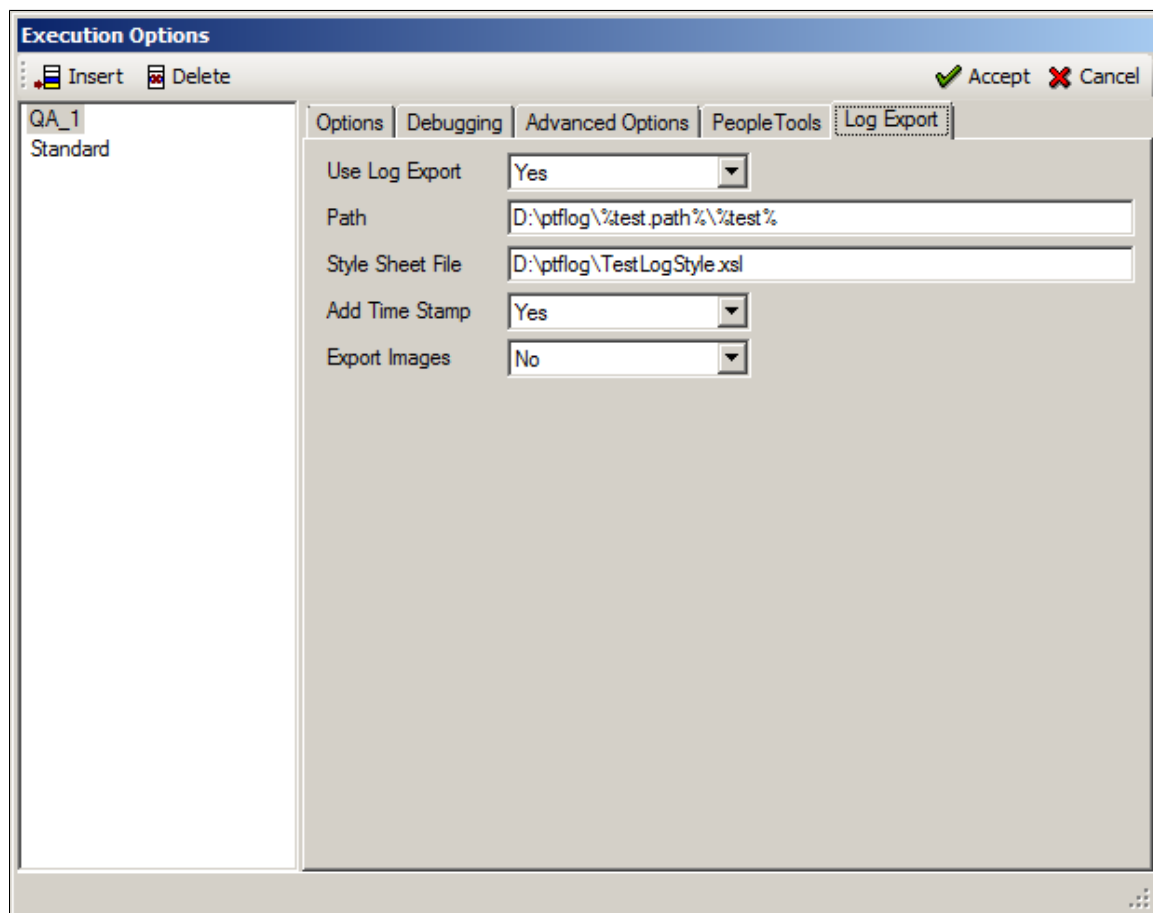
**Log Export**

The Log Export tab allows you to archive the result logs to a file system in XML + XSL format at the end of each test execution, which provides the following benefits:

- The logs are accessible from any browser.
- The PTF client is not required to verify test results.
- The logs are available even after the environment or database is brought down or upgraded.
- Since the log is in XML format, you can write customized utilities to parse or interpret the logs as needed.

**Image: Execution Options dialog - Log Export tab**

This example illustrates the fields and controls on the Execution Options dialog - Log Export tab. You can find definitions for the fields and controls later on this page.

**Use Export Log**Select *Yes* to activate the export log functionality.**Path**

Specify the shared drive to store the log files.

**Style Sheet File**


---

**Note:** Ensure that the shared drive path allows users full read/write access. The path can be customized using existing system variables. See [System Variables](#)

---

(Optional) Specify the path to the stylesheet. If specified, the exported XML log will be saved with the stylesheet.

You can create your own stylesheet to format the XML. If this field is left blank, the XML will not be saved with a stylesheet.

---

**Note:** Ensure that the shared drive path allows users full read/write access. The path can be customized using existing system variables. See [System Variables](#)

---

**Add Time Stamp**

If set to *Yes* the XML filename will be appended with the Time Stamp in the following format:

```
<TEST_NAME>-<LOG_ID>-T<YYYYMMDD>_
<HHMMSS>
```

Example: FSCM\_INS\_VER-LOG5-T20121128\_163649.XML

**Export Images**

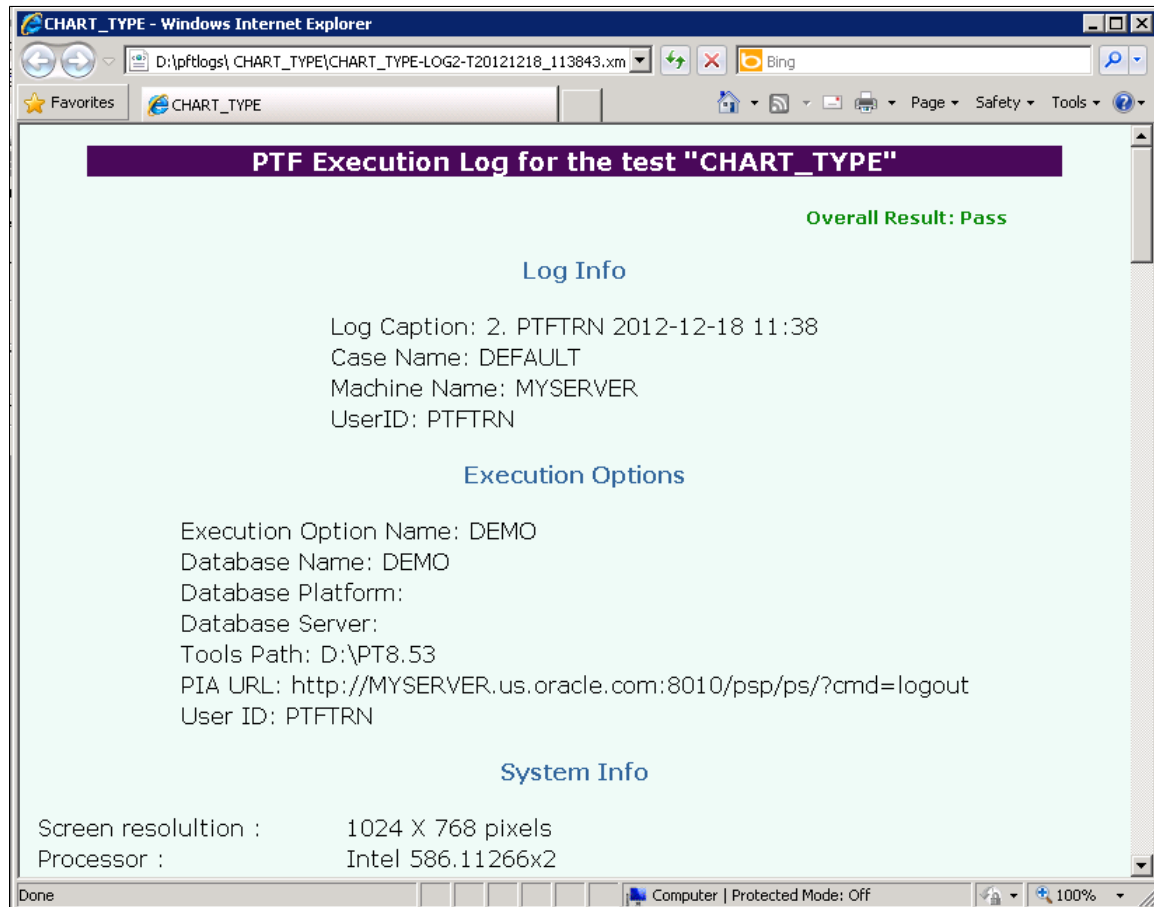
If set to *Yes* the Image will be saved in the same Log folder as the XML Log in the following format:

```
<TEST_NAME>-<LOG_ID>-<OPTIONAL_TIME_STAMP>-
<LINE_NUMBER_AS_SHOWN_IN_LOG>
```

Example: FSCM\_INS\_VER-LOG5-T20121128\_163649-Line30.JPEG

### Image: Sample export log displayed in the browser

This example illustrates a sample export log displayed in the browser.



### Default Execution Option

When you click the Accept button in the Execution Options dialog box, PTF stores the name of the selected execution option and uses it, by default, in subsequent test recordings and executions. A link in the lower right corner of the PTF application window displays the name of the default execution option. You can click the link to open the Execution Options dialog box.

### Overriding the Default Execution Option

Use an Execution step with a Set\_Options action in a shell test to override the default execution option.

See [Execution](#).

### Related Links

[Use Configuration and Execution Options](#)

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## Configuring Execution Options in PeopleSoft Internet Architecture

You use execution options to configure settings for the PeopleSoft applications that you test with PTF. Execution options are stored as part of the metadata for a PTF environment and are available to all users of that environment. Only a PTF administrator (a user with the PTF Administrator role) is able to insert, delete, or modify execution options. You can configure execution options either in the PTF client, or by using the Define Execution Options component in the PeopleSoft Internet Architecture.

This section describes how to define execution options using the Define Execution Options component in PIA. For information about define execution options in the PTF client, see [Configuring Execution Options in PTF Client](#).

To configure execution options in PIA, complete the following tasks:

- Specify execution options.
- Configure debugging options.
- Define advanced options.
- Specify PeopleTools options.
- Establish Export Log options.

### Specifying Execution Options

Use the Define Execution Options (PSPTTSTEXEOPTIONS) page to define PTF options for executing tests.

#### Navigation

PeopleTools, Lifecycle Tools, Test Framework, Define Execution Options

This example shows the Execution Options component - Options page in PIA:

### Image: Define Execution Options Page

This example illustrates the fields and controls on the Define Execution Options page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Define Execution Options' page in the PIA interface. At the top, there are five tabs: 'Options' (selected), 'Debugging', 'Advanced Options', 'PeopleTools', and 'Export Log'. Below the tabs, the 'Name' field is set to 'QA\_1'. The '\*Prompt' dropdown is set to 'No'. The 'Application URL' text box contains 'http://myserver.us.oracle.com:8010/PSAPP/signon.html'. The 'User ID' text box contains 'QAMGR'. The 'Password' field is disabled, with a message: 'Password cannot be modified in PIA. It can only be modified from the Test Framework client.' The 'Process Server' dropdown is set to 'PSNT'. The '\*Date Format' dropdown is set to 'MM/DD/YYYY'. The 'Skip Language' dropdown is set to 'No'. The 'Form Factor' dropdown is set to 'None'. The 'Log Folder' text box contains 'QATESTS'. The '\*Verbose' dropdown is set to 'Yes'.

The fields on the Define Execution Options page are the same as the fields on the Options tab in the PTF client, with the exception that you cannot modify passwords on the PeopleSoft application component.

<b>Prompt</b>	Specify whether the Execution Options dialog appears when a user executes a test.
<b>Application URL</b>	Enter the URL for the PeopleSoft application to be tested.
<b>User ID</b>	Enter a valid user ID for the application database.
<b>Password</b>	This field is unavailable for entry. The password must be specified using the PTF Client.
<b>Process Server</b>	Select a process server from the drop-down list. This list is populated by the Process Server List field in the Configuration Options page.
<b>Date Format</b>	Select a date format.
<b>Skip Language</b>	Select <i>Yes</i> to bypass the language selection on the PIA login page during browser.start_login.
<b>Form Factor</b>	Select the Form Factor size to use on the PIA login page during browser.start_login.
<b>Log Folder</b>	Select or enter the folder name to which logs will be written. If the folder does not exist it will be created.



**Verbose**

Specify whether to use verbose logging.

Select *Yes* to log a detail line in the log for each step executed in the test.

Select *No* to log only the test rollup status (Pass or Fail) at the test level and to log a detail line for failed steps.

See [Configuring Execution Options in PTF Client](#).

## Configuring Debugging Options

Use the Define Execution Options – Debugging (PSPTTSTDEBOPTIONS) page to define PTF configuration options.

**Navigation**

PeopleTools, Lifecycle Tools, Test Framework, Define Execution Options

Select the Debugging Options tab.

**Image: Define Execution Options-Debugging page**

This example illustrates the fields and controls on the Define Execution Options – Debugging page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Define Execution Options-Debugging' page. At the top, there are five tabs: 'Options', 'Debugging' (which is active), 'Advanced Options', 'PeopleTools', and 'Export Log'. Below the tabs is a form area. The first field is 'Name' with the value 'QA\_1'. Below this are two dropdown menus: '\*Skip Save' and '\*Skip Run Request', both of which are currently set to 'No'.

**Skip Save**

Select *Yes* to prevent a test from executing a save. You would, for instance, select this option to avoid duplicate values in the application database if you plan to run a test repeatedly.

**Skip Run Request**

Select *Yes* to prevent the test from executing process requests.

## Defining Advanced Options

Use the Define Execution Options - Advanced Options page (PSPTTSTADVOPTIONS) page to define multiple portal URLs and to enable persistent variables.

PTF uses the portal URL to access the component when there is a step in the test to set the browser url (Browser.Set\_URL). See [Set\\_URL](#). To add a portal URL, click the Add icon. To remove a portal URL click the Delete icon.

## Navigation

PeopleTools, Lifecycle Tools, Test Framework, Define Execution options

Select the Advanced Options tab.

### Image: Define Execution Options - Advanced Options page

This example illustrates the fields and controls on the Define Execution Options - Advanced Options page. You can find definitions for the fields and controls later on this page.

#### Portal Name

Enter a portal name.

---

**Note:** The name is saved in upper case.

---

#### URL

Enter the portal URL.

The portal URL is entered in the following format:

```
http://webserver/psp/domain/portalname/node
```

For example: `http://myserver.us.oracle.com:8010/ps/ps/EMPLOYEE/QE_LOCAL/`

---

**Note:** The ending backslash / is optional

---

#### Use Persistent Variables

Select to enable saving and using persistent variables. Selecting this option enables the other fields in this group.

#### By Execution Option Name

This option is automatically selected when you select the Use Persistent Variables check box. Persistent variables are stored

in the database keyed by execution option name. Persistent variables can also be keyed by User ID, machine name or both.

### By User ID

Select to store and retrieve persistent variables by PTF user ID.

### By Machine Name

Select to store and retrieve persistent variables by machine name.

## Specifying PeopleTools Options

Use the PeopleTools page (PSPTTSTTOOLOPTIONS) to supply the information required to connect to DataMover.

### Navigation

PeopleTools, Lifecycle Tools, Test Framework, Define Execution options

Select the PeopleTools tab.

This example shows the Define Execution Options - PeopleTools page:

### Image: Define Execution Options - PeopleTools page

This example illustrates the fields and controls on the Define Execution Options - PeopleTools page. You can find definitions for the fields and controls later on this page.

The fields on the PeopleTools page are the same as the fields on the PeopleTools tab in the PTF client, with the exception that you cannot modify passwords on the PeopleSoft application component.

### Tools Path

Enter the path to PS\_HOME for this environment.

### Connection Type

Select the connection type.

<b>Server Name</b>	Enter the name of the database server.  The Server Name field is enabled for only Sybase and Informix platforms.
<b>Database Name</b>	Enter the name of the database for this environment.
<b>User ID</b>	Enter a valid database user ID.
<b>Password</b>	This field is unavailable for entry. The password must be specified using the PTF Client.
<b>DMS Input Path</b>	Enter the DataMover input path.
<b>DMS Output Path</b>	Enter the DataMover output path.
<b>DMS Working Path</b>	Enter the DataMover working path.

## Establish Export Log Options

Use the Define Execution Options - Export Log page (PSPTTSTLOGOPTIONS) to automatically archive the result logs to a file system in XML + XSL format at the end of each test.

This option provides the following benefits:

- The logs are accessible from any browser.
- The PTF client is not required to verify test results.
- The logs are available even after the environment or database is brought down or upgraded.
- Since the log is in XML format, you can write customized utilities to parse or interpret the logs as needed.

## Navigation

PeopleTools, Lifecycle Tools, Test Framework, Define Execution options

Select the Export Log tab.

### Image: Define Execution Options - Export Log page

This example illustrates the fields and controls on the Define Execution Options - Export Log page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Define Execution Options - Export Log' page. At the top, there are five tabs: 'Options', 'Debugging', 'Advanced Options', 'PeopleTools', and 'Export Log'. The 'Export Log' tab is currently selected. Below the tabs, there is a form with the following fields and controls:

- Name:** A text box containing 'QA\_1'.
- Use Log Export:** A dropdown menu set to 'Yes'.
- Path:** A text box containing 'D:\ptflog\%test.path%\%test%'.
- Style Sheet File:** A text box containing 'D:\ptflog\TestLogStyle.xsl'.
- Add Time Stamp:** A dropdown menu set to 'Yes'.
- Export Images:** A dropdown menu set to 'No'.

#### Use Log Export

Select *Yes* to activate the export log functionality.

#### Path

Specify the shared drive to store the log files.

---

**Note:** Ensure that the shared drive path allows users full read/write access. The path can be customized using existing system variables. See [System Variables](#)

---

#### Style Sheet File

(Optional) Specify the path to the stylesheet. If specified, the exported XML log will be saved with the stylesheet.

You can create your own stylesheet to format the XML. If this field is left blank, the XML will not be saved with a stylesheet.

#### Add Time Stamp

If set to *Yes* the XML filename will be appended with the Time Stamp in the following format:

```
<TEST_NAME>-<LOG_ID>-T<YYYYMMDD>_<HHMMSS>
```

Example: FSCM\_INS\_VER-LOG5-T20121128\_163649.XML

#### Export Images

If set to *Yes* the Image will be saved in the same Log folder as the XML Log in the following format:

<TEST\_NAME>.<LOG\_ID>.<OPTIONAL\_TIME\_STAMP>.  
<LINE\_NUMBER\_AS\_SHOWN\_IN\_LOG>

Example: FSCM\_INS\_VER-LOG5-T20121128\_163649-  
Line30.JPEG

## Chapter 3

# Using PeopleSoft Test Framework

## Using PTF Explorer

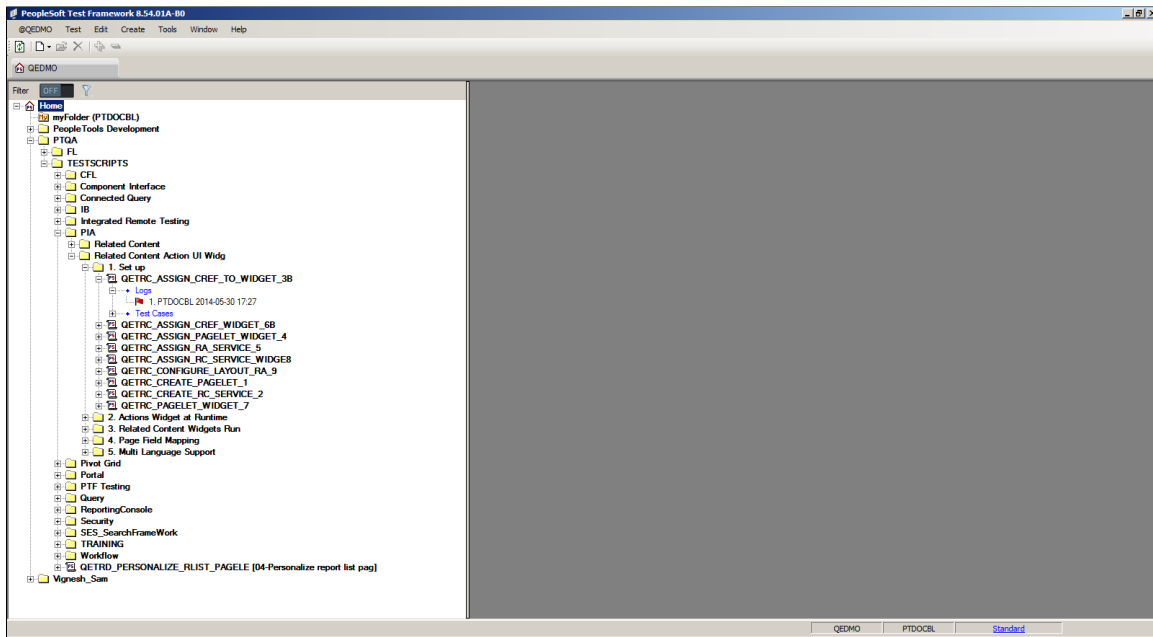
This section provides an overview of PTF Explorer and describes how to define and apply filters.

### Understanding PTF Explorer

PTF Explorer gives you access to the PTF test assets (tests, test cases, libraries, and logs) stored within an application database. Assets appear in a tree structure with collapsible folders for organizing test assets. After PTF has been installed and configured, PTF Explorer is the first pane that appears when you start the client. It is labeled with the name of the PTF environment, QEDMO in this example:

#### Image: Example of the PTF Explorer User Interface

This example illustrates the PTF Explorer user interface.



You use PTF Explorer to:

- Create tests and folders.
- Delete tests and folders.
- Copy and move tests.
- Rename tests and test cases.
- Navigate to and open test assets.

- Associate tests with Application Designer projects.

## Using myFolder

The PTF Explorer tree contains a folder called myFolder. You can use myFolder to store tests that you do not want to share with other users. Users with the PTF User role can create, edit, and delete tests *only* in myFolder.

## PTF Explorer Menus

This section describes the menus that appear when PTF Explorer has focus. Note that many menu commands are specific to the currently selected item.

This table describes the PTF Explorer PTF menu commands:

**Note:** The PTF Explorer PTF Menu name corresponds to the name of the current PTF environment preceded with an @ character. In the previous example, the PTF Explorer menu name is @QEDMO.

<b>PTF Menu Command (@&lt;PTF_Environment&gt;)</b>	<b>Usage</b>
Refresh	Refreshes the current view.
Projects	Opens the Projects dialog box.
Local Options	Opens the Local Options dialog box.
Execution Options	Opens the Execution Options dialog box.

This table describes the PTF Explorer Test menu commands:

<b>Test Menu Command</b>	<b>Usage</b>
Open	Opens the selected test or test case.
Delete	Deletes the selected test.
Rename	Renames the selected test, test case, or folder.
Refresh Selection	Refreshes the view for the selected test.
Expand Selection	Expands all the branches in the selected node.
Collapse Selection	Collapses all the branches in the selected node.

The PTF Explorer Edit menu contains standard Microsoft edit commands, such as Cut, Copy, and Paste, and the following PTF Explorer Edit menu command in the table.

This table lists the additional PTF Explorer Edit menu command:



<b>Edit Menu Command</b>	<b>Usage</b>
Copy Link to Clipboard	Copies the link for the selected test, test case, or log to the clipboard. You can use this information in conjunction with the Quick Open command.

Use the PTF Explorer Create menu to create folders and tests.

This table describes the Create menu commands:

<b>Create Menu Command</b>	<b>Usage</b>
Folder	Creates a new folder within the selected folder.
Test	Creates a new test in the selected folder.
Shell Test	Creates a shell test in the selected folder.

This table describes the PTF Explorer Tools menu commands:

<b>Tools Menu Command</b>	<b>Usage</b>
Message	Opens the Message tool, which enables you to monitor test execution. The Message tool displays details about the current step, including name, object type, and value.
Log Manager	Opens the Log Manager tool, which enables you to delete logs from tests.
Mass Update	Opens the Mass Update tool, which enables you to modify steps from multiple tests based on specific criteria.

This table describes the PTF Explorer Window menu command:

<b>Window Menu Command</b>	<b>Usage</b>
Quick Open	<p>Opens a test, test case or a text execution log with data that was copied to the clipboard using the Copy Link to Clipboard command.</p> <p>Using the Copy Link to Clipboard command and the Quick Open command together enables users to easily share tests without having to navigate to the test in PTF Explorer. You can select a test and select Edit, Copy Link to Clipboard. Then, you paste that data into a text message and send it to another user, who can then copy and paste the data into the Quick Open dialog box and open the test.</p> <p>You can also use this menu command to search for and open multiple tests, test cases, or text execution logs.</p>

<b>Window Menu Command</b>	<b>Usage</b>
Close All	Closes all windows.

## Multi-Select Functionality

Based on the item or items selected in the tree view, when you right-click a list of valid actions is displayed. The tree view supports multiple selections. The following actions are supported with multi-select:

- Open tests and logs.
- Cut and paste folders and tests.
- Delete tests and folders.
- Expand and collapse tests and folders.

The valid actions are based on the PTF role associated with the logged on user.

## Defining and Applying Filters

You can create and apply filters to the PTF Explorer tree, to view subsets of test assets based on specific criteria. This enables you to view only tests with certain characteristics, or that belong to certain categories, such as: tests with similar names; tests belonging to the same parent folder; tests last updated by the same user; tests resulting from the same Test Maintenance Report run. When the filter is applied, if a folder does not contain any tests that meet the filter criteria, then that folder is hidden.

---

**Note:** The tree view does not refresh automatically with every edit or action on the Explorer Tree. If you create a test which does not satisfy the active filter requirements, the folder for that test will not automatically be hidden from the tree; the folder remains visible until you update the filter or refresh the tree view.

---

### Filter Action Icons

Use the following filter action icons, which appear above the PTF Explorer tree, to define, activate, or clear a filter:



Click to open the Tree Filters dialog, where you can define filter criteria.



Indicates that there is no active filter. This icon functions as a toggle switch; click to activate the filter.



Indicates that a filter is currently active. This icon functions as a toggle switch; click to clear the filter.

## Filter Definition

To define a filter, click the Set Filter icon to open the Tree Filters dialog box, and specify the filter criteria.

### Image: Tree Filter Dialog Box

This example illustrates the fields and controls in the Tree Filter dialog box.

The filter criteria fields are grouped by these filter categories:

- **Test filters:** Includes these test properties: Test Name, Test Description, Updated By, Update Date/Time, Version.
- **Step filters:** Includes these step properties: Recognition, Component, Page, Record, Field.
- **Maintenance report filters:** Includes tests flagged by the test maintenance report by these properties: UserID, Project Name, Seq (sequence).
- **Coverage report filters:** Includes tests flagged by the test coverage report by these properties: UserID, Project Name.
- **Others filters:** Includes test by their associated Application Designer Project Name.

Filters specifying a comparison against a text value use a *starts with* condition (when no wildcards are used) or a *Like* condition (when wildcards are used). For example, the following filter field entries would return the values listed:

<b>Filter Criteria</b>	<b>Returns</b>	<b>Does Not Return</b>
DAY	DAY, DAYS, DAY_ONE	MONDAY
DAY%	DAY, DAYS, DAY_ONE	MONDAY

<b>Filter Criteria</b>	<b>Returns</b>	<b>Does Not Return</b>
%DAY	DAY, MONDAY	DAYS, DAY_ONE
%DAY%	DAY, DAYS, DAY_ONE, MONDAY	

The supported standard wildcard characters are:

<b>Wildcard</b>	<b>Search Action</b>
% (percent symbol)	Match one or more characters.
_ (underscore)	Match any single character.
\ (backslash)	Escape character; do not treat the next character as a wildcard.

Filters specifying a comparison against a Date/Time, Version, or Seq (sequence) use a *greater than or equal to* condition.

When multiple filters are specified, the filter clauses are all conjoined with ANDs (rather than ORs).

---

## Using the Test Editor

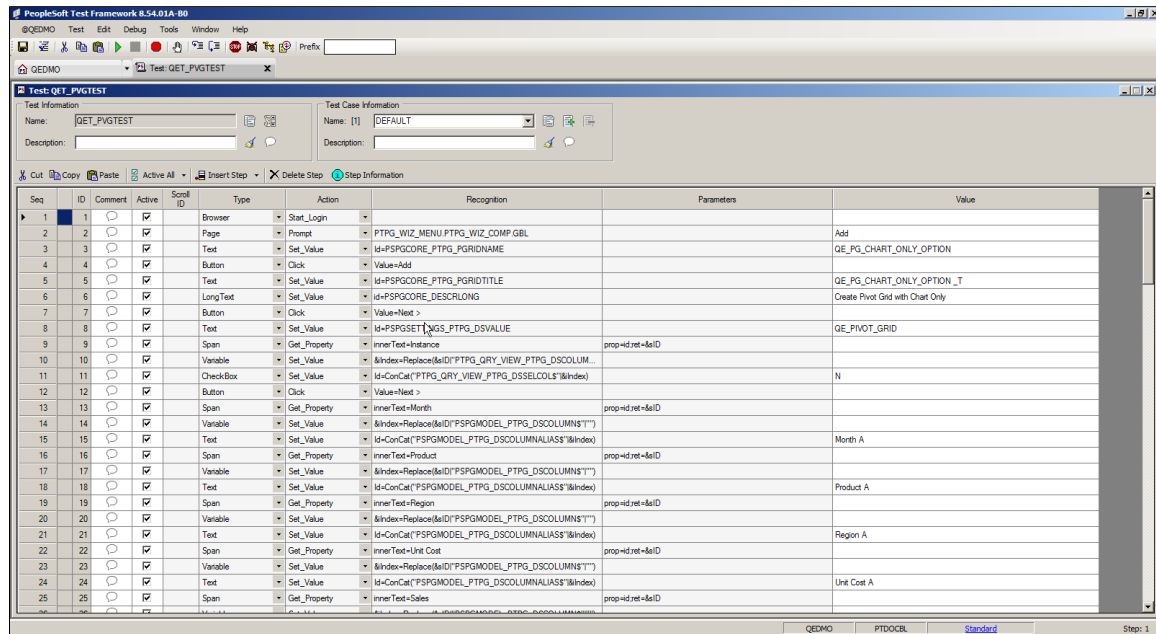
When you create or open a test, test case, or shell test, it opens in the Test Editor. The Test Editor enables you to:

- Record and edit test steps.
- Add, copy, and delete test steps.
- Create and edit test cases.
- View both test and test case in a single view.
- Debug tests.

This example shows the PTF Test Editor:

### Image: PTF Test Editor

This example illustrates the PTF Test Editor. You can find definitions for the menus and controls later on in this section.



This section discusses:

- Test Editor menus.
- Test Editor toolbar.
- Test window.
- Test window fields.
- Test window toolbar.
- Test step fields.

## Test Editor Menus

The following menus appear when the Test Editor has focus. Note that many menu commands are specific to the currently selected step.

This table describes the Test Editor PTF menu commands:

<b>PTF Menu Commands</b>	<b>Usage</b>
Projects	Opens the Projects dialog box.
Local Options	Open the Local Options dialog.
Execution Options	Open the Execution Options dialog.

This table describes the Test Editor Test menu commands:

<b>Test Menu Command</b>	<b>Usage</b>
Save	Saves the current test.
Save As	Creates a copy of the current test with a new name.
Test Case Save As	Creates a test case as a copy of the current test case.
Export	Export test cases and test case values to a character-delimited text file, such as comma-separated values (csv) file.
Import	Import test cases and test case values from a character-delimited text file, such as comma-separated values (csv) file.
Copy Link to Clipboard	<p>Copies a link to the test to the clipboard.</p> <p>You can send this information to another user, who can use the Window, Quick Open feature to open the test without having to navigate to it in PTF Explorer.</p>
Validate Test	<p>Validate the test against the application metadata to identify changes in the metadata since the test was last modified. As you modify a test based on the results of a test maintenance report, you can validate the test by running a test maintenance report. The report is generated for a single test, using analyses of compare reports generated in Step 2 of the Test Maintenance Wizard.</p> <p>See <a href="#">Creating Test Maintenance Reports</a>.</p>
Check Syntax	<p>Validates the parameter syntax and values.</p> <p>See <a href="#">PTF Test Language</a></p>
Run	Runs the current test.
Run from Step	Runs the current test from the specified line number.
Pause	Pauses execution of the test.
End	Stops execution of the test.
Open Test Recorder	Launches the Test Recorder.

The Test Editor Edit menu contains standard Microsoft edit commands, such as Cut, Copy, Paste, and Delete, and the following PTF commands:

This table lists the additional PTF commands:

<b>Edit Menu Command</b>	<b>Usage</b>
Find	<p>Finds occurrences of a specific text string in the current test.</p> <p>Select the List all MatchingSteps check box to create a list of matches.</p>

<b>Edit Menu Command</b>	<b>Usage</b>
Again	Searches for the Find string again.

This table describes Test Editor Debug menu commands:

<b>Debug Menu Command</b>	<b>Usage</b>
Step Into	Executes the current step of the test and advances to the next step.
Step Over	Executes the current step of the test and advances to the next step, unless the next step calls another test. Steps over called tests.
Toggle Break	Sets a break point at the selected step or removes an existing breakpoint.
Clear All Breaks	Removes all break points.
Stop on Error	Stops execution if the test encounters an error.
Disable Screen Shots	By default, the recorder creates a screen shot with each error. Select this option to save space in the log by not creating screen shots.
Highlight Errors	Highlights errors in the log in yellow.
Overwrite Log	If a log window is open after the most recent execution of a test, you can choose whether to append to the open log or overwrite the open log.  Select this option to overwrite the open execution log.

This table discusses the Test Editor Window menu commands:

<b>Window Menu Command</b>	<b>Usage</b>
Quick Open	Using information from the Copy Link to Clipboard command, quickly opens a test without having to navigate to the log in PTF Explorer. You can also use this menu command to search for and open multiple tests, test cases, or text execution logs.
Close All	Closes all windows.

## Test Editor Toolbar

In addition to buttons for the standard Microsoft cut, copy, and paste commands, the test editor toolbar provides the following functions:



Check Syntax



Run test.



End test.



Show Test Recorder.



Debug break.



Step into.



Step over.



Stop on error.



Disable screen shots.



Highlight errors in the execution log.



Overwrite the open execution log.

Prefix

Specify text that will be added to text fields when the test is executed. The prefix text is substituted for the **#PREFIX#** reserved word in the Value field. Using a prefix can help prevent an error caused by a duplicate entry when the page is saved.

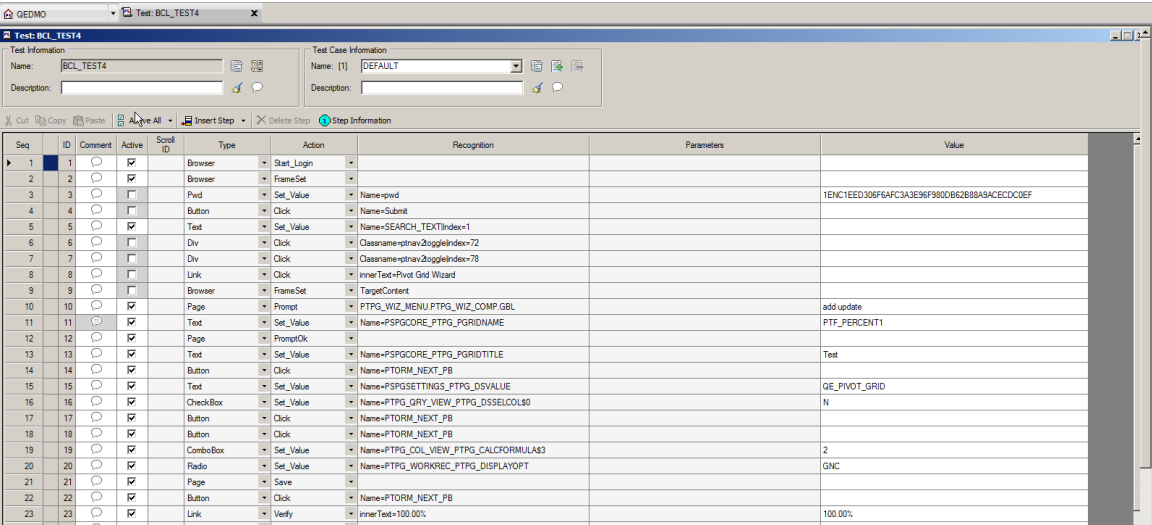


Test Window

You can have multiple tests open in PTF. Each test has its own test window. This example shows a Test Editor test window:

Image: Example of a Test Editor Test Window

This example illustrates the fields and controls on the Test Editor test window. You can find definitions for the fields and controls later on this page.



Test Window Fields

The following fields appear in the test window:

Test Information Fields

- Name

Displays the test name. This field is display-only.
- Description

Brief description of the test. You can enter a detailed description in the Comments.

Test Information Functions



Test Save As.



Click to access the Message Recognition dialog box.

Use the Message Recognition dialog box to define how PTF will respond to messages that are encountered during execution of the test. The Message Recognition icon contains a check mark when the message recognition is enabled for the test.



Open the Test Properties dialog. In the Language field, select the language for the PeopleSoft application. The default is English.

Changing the value in the Language field only affects the language the test selects at sign in. It does not enable the test to execute against a different language. PTF tests should be executed against the same language in which they were recorded.

Select the Variable Action to use with this test. The variable action determines whether or not to use persistent variables. By default the action is set to None and persistent variables are not used. See [Using Persistent Variables](#)

Select the Library Test checkbox to make the test a library test.

See [Using Library Tests](#).



Open the Test Comments dialog. You can enter a long description of the test using Rich Text and add images. Click the take Snapshot icon in the Comment dialogue to insert a screenshot.

## Test Case Information Fields

### Name

Displays the name of the current test case. You can select a different test case using the drop-down list. When you create a test, the system automatically associates it with a test case named DEFAULT.

### Description

Brief description of the test case. You can enter a detailed description in the comments.

## Test Case Information Functions



Test Case Save As.



Create a new test case.



Delete the selected test case.



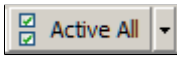
Open the Test Case Properties dialog.



Open the Test Case Comments dialog. You can enter a long description of the test case using Rich Text and images.

## Test Window Toolbar

In addition to buttons for the standard Microsoft cut, copy, and paste commands, the test window toolbar provides the following functions:



Selects the Active check box for all steps. Click the drop-down arrow for additional step activation options, including:

- Active Selected Steps.

Selects the Active check box for only selected steps.

- Inactive Selected Steps.

Deselects the Active check box for only selected steps.

- Inactive All.

Deselects the Active check box for all steps.



Inserts a new, blank step below the current step. Click the drop-down arrow to insert the new step above the current step.



Deletes the current step.



Displays the Step Information dialog box showing the PeopleTools metadata associated with the object referenced in the step.

## Test Step Fields

A PTF test consists of a series of steps. Each step in a test is composed of the following fields:

### Seq (sequence)

A system-generated sequence number. Test steps execute according to Seq order. When you move, add, or delete a step, Seq is refreshed.

### ID

A system-generated unique identifier for each step in a test. This value does not change when you move, add, or delete a step.

Test maintenance reports use the ID value.

### Comment

When you click on the comment icon in the comment field a rich text editor opens that enables you to add detailed comments for each step. The comment field is gray when it contains a comment.

### Active

Deselect this field to inactivate a step. PTF will skip inactive steps when the test runs. PTF syntax check is also skipped on inactive steps. Each step is active by default. This field is grayed for inactive steps.

### Scroll ID

This field is only required for scroll handling.

### Type

The step type. Often, the step type corresponds to the type of application object the step is to take an action on or to validate, such as Text, Check box, Browser, and so on. Other step types

perform certain functions, such as executing a test or query, setting a variable, or performing conditional processing.

### Action

The action the test is to take . Each step type has a set of associated actions. The two most common actions used with a Text step type, for example, are *Set* and *Verify*.

### Recognition

The means that PTF uses to identify the HTML object within the application. Often, this is the HTML ID property.

### Field Label

Contains the label text of the page control referenced in the Recognition field.

The value for the Show Field Label option in the Local Options dialog box determines whether this column appears:

- If Column is selected, the Field Label column appears.
- If Tooltip is selected, the column does not appear; instead, the field label appears in a tooltip when you position the mouse cursor over the Value field.

For more information about setting local options, see [Configuring Local Options](#).

### Parameters

The conditions that apply to this specific step, if applicable.

---

**Note:** This field was introduced in release 8.54; in previous releases, parameters were specified as part of the Recognition field. When you load and save a test from release 8.53 or lower, PTF automatically moves any parameters from the Recognition field to the Parameters field.

---

### Value

In a typical recorded step, this is the value the tester entered for an object.

In a step recorded in Verify mode, this would be the value that was present in the object when it was checked.

Value is part of the test case, not the test itself.

### Related Links

[PTF Test Language](#)

[Creating Tests](#)

---

## Using the PTF Test Recorder

You use the PTF Test Recorder to record the steps in a test. When you record a test, PTF monitors each action you perform in the target application and creates a corresponding step in the test. As you

are recording, you can add additional steps, such as Verify, Log, and Conditional, that do not directly correspond to actions performed in the target application.

This section discusses:

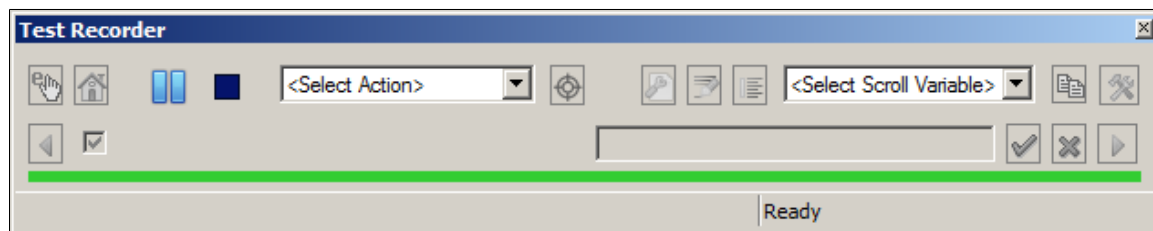
- The Test Recorder toolbar.
- Recording action tools.
- Step insert tools.
- Step modification tools.
- Step utility tools.

## Test Recorder Toolbar

To access the Test Recorder toolbar, select Test, Open Recorder or click the Show Test Recorder icon.

### Image: Test RecorderToolbar

This example illustrates the tools and controls on the Test Recorder toolbar. You can find definitions for the tools and controls later on in this section.




---

**Note:** To move the Test Recorder toolbar, click in the title bar to the left of the close icon and drag to the new location.

---

The Test Recorder toolbar is divided into four areas:

- Recording action tools.
- Step modification tools.
- Tool hints bar.
- Status bar.

## Recording Action Tools

Use these tools to control recording actions: start the web client; select the browser; and start, stop, or pause recording.

This list describes the recording action tools that are available in the Recorder Toolbar.



Hook a browser. Drag and drop this icon onto an active PeopleSoft browser session to hook the recorder to that browser. PTF will only hook a browser that was originally launched

by PTF. You can drag the hook icon to any portion of the PIA application. No page objects will be highlighted.



Launch a PeopleSoft application in a browser window using the URL of the default execution option and hook the recorder to that browser.

See [Configuring Execution Options in PeopleSoft Internet Architecture](#) and [Configuring Execution Options in PTF Client](#).



Begin recording or resume recording. When you begin recording, the recorder adds or inserts steps following the current step. When you resume recording after pausing you are prompted to choose from the following options:

- Insert new steps at the current step (do not delete subsequent steps in the test)
- Insert new steps at the current step (delete subsequent steps in the test)
- Insert new rows at the end of the test



Stop recording and write recorded steps to the test.



Pause recording.

## Step Insert Tools

Use the items in the <Select Action> list box to insert action steps while recording. These items are grouped into these categories:

- Drag and drop actions.
- Step insert actions.

### <Select Action> - Drag and Drop Actions

These recording action tools capture page element recognition data using a method called “drag and drop”, which refers to using the mouse to click an item and drag it then drop it to another location. To use these options while recording:

1. Select a drag and drop option from the <Select Action> list

This activates the Target icon, making it available to use.

2. Click and drag the Target icon to the desired page element.

Notice that the mouse cursor changes to a bold question mark.

3. Highlight the page element, then release the mouse button to drop the icon over it.

As you hover over a page element, the page element highlights. The element that you intend to reference must be highlighted when you drop the icon over it. If the field is not highlighted, PTF will not recognize it.

Drag and drop actions are not applicable to all HTML objects.

This list describes the drag and drop options that are available in the Recorder Toolbar <Select Action> list:

<b><i>Verify</i></b>	<p>Adds a Verify step. Drag and drop over a page element. The step is automatically populated with the object ID and value of the field.</p> <p>See <a href="#">Verify</a>.</p>
<b><i>Show Popup</i></b>	<p>Opens field pop ups or organization chart menu items.</p> <p>See <a href="#">MouseOver</a>.</p>
<b><i>Get Property</i></b>	<p>Adds a GetProperty step. Drag and drop over a page element. You are prompted with a list of properties for the selected page element. Enter a variable name or select an existing variable name for one or more properties. The recorder adds a GetProperty step for each property you identify.</p> <p>See <a href="#">Get_Property</a>.</p>
<b><i>Field Exists</i></b>	<p>Adds an Exists step. Drag and drop over a page element. You are prompted to enter a variable name or select an existing variable and to select an Expected value. Valid values are True, False, or Ignore.</p> <p>See <a href="#">Exists</a>.</p>
<b><i>Set Scroll Key</i></b>	<p>Adds a Scroll.Key_Set step. Drag and drop over a key field in a scroll. Enter a Scroll ID in the Step Modification area and click the Confirm icon.</p> <p>See <a href="#">Incorporating Scroll Handling</a>.</p>
<b><i>Get Label</i></b>	<p>Adds a Field.GetLabel step. You are prompted for Return Variable.</p> <p>See <a href="#">GetLabel</a></p>
<b><i>HTMLCell Get Index</i></b>	<p>Returns the index value for an HTML table. Drag and drop over the HTML table label. You are prompted for the return variable that will contain the HTML index.</p> <p>See <a href="#">CellGetIndex</a></p>
<b><i>HTMLCell Get Value</i></b>	<p>Returns the cell value for an HTML table.. Drag and drop over the HTML table cell. You are prompted for the return variable that will contain the HTML cell value.</p>

See [CellGetValue](#)

## <Select Action> - Step Insert Actions

These recording action tools insert test steps that provide logic constructs, manage scroll actions, and add variables and logs.

This list describes the step insert options that are available in the Recorder Toolbar <Select Action> list:

### ***Add Log***

Adds a Log step.

You are prompted to select a Log action and enter text for the Message and Details.

### ***If-Then***

Adds a Conditional If\_Then construct. You are prompted for an expression, such as &Exists=True. The Recorder inserts a Conditional.If\_Then step. Record additional steps, then select *End-If* to add a Conditional.End\_If step.

See [Conditional](#).

### ***End-If***

Adds a Conditional.End\_If step.

### ***Add Variable***

Adds a Variable.Set\_Value step. You are prompted for Variable Name and Value. User-defined variables and PTF test variables appear in the <Select Variable> drop down list.

See [Variable](#), [System Variables](#).

### ***Scroll Action***

Adds a Scroll.Action step. You are prompted to enter a Scroll ID, return variable, and action. Click the Confirm icon.

## Step Modification Tools

As you are recording, you can modify steps recorded during the current session without stopping the recording and exiting the Test Recorder.

This list describes the step modification tools that are available on the Test Recorder toolbar:



Move to the previous step in the recording. When you move to the previous step or the next step, recording is paused. You must click the Start Recording icon to continue recording.



Move to the next step in the recording. When you move to the previous step or the next step, recording is paused. You must click the Start Recording icon to continue recording.



Specify whether the step is active or inactive.



Drag and drop to capture page element information. This icon is used in conjunction with the drag and drop items in the <Select Action> list.



**<Select Variable>**

Select a variable to insert.

This list is used in conjunction with items in the <Select Action> list that utilize variables.



Accept step modifications. If you move to another step or continue recording without accepting modifications, the modifications are lost.



Cancel modifications.



Modify the step.



Insert a #PREFIX# keyword at the beginning of the text in the Value field.



Edit test step comments.

## Recorder Utility Tools

This list describes the recorder utility tools that are available on the Test Recorder toolbar:



Copy the recording to the clipboard.



Configure recording settings.

- Use Page Prompt

If you select the Use PagePrompt check box, the Test Recorder will replace menu navigation steps with a Page.Prompt step and Page.PromptOK step. The Test Recorder records menu navigation steps, but they are set to inactive.

---

**Note:** When recording a search page with facets, PTF does not automatically insert Page.Prompt constructs because all user actions with facets must be recorded.

---

When using Page Prompt mode, explicitly enter the values for the key fields. Do not perform a partial search and pick from the list. If you must click a dropdown list, search, or take any other action on a search page, do not use Page Prompt mode, use explicit menu navigation.

---

**Note:** Page Prompt uses advanced search mode on search pages. In certain cases, objects that are available in basic search mode are not available in advanced search mode. If you record in Page Prompt mode on a search page that uses basic search mode, you may encounter ‘Object not found’ errors. If that occurs, you can either delete the extra steps or inactivate the Page.Prompt steps and activate the navigation steps.

---

See [Page](#).

- Message Recognition

Select the Message Recognition check box to automatically configure message recognition for any messages, such as error, warning, or information messages, that the application generates during recording. When the Test Recorder adds a new message it also sets Use Message Recognition to True.

See [Handling Application Messages](#).

- Run Control Recognition

If you select the Run Control Recognition check box, the Test Recorder will replace all recorded actions on a PsRun Control (Process Scheduler page) with the Process.Run Step.

---

**Note:** Similar to the Page Prompt with facet, this option is only applicable to a conventional Process Scheduler page.

---

See [Run](#)

- Ignore Login Steps

If you select the Ignore Login Steps check box, the Test Recorder will ignore all actions on the login page.

- File Download Prompt

Select the File Download Prompt check box to prompt for the file path when recording a step that does a file download.

See [Download](#)

- Use Scroll Variables

If you select the Use Scroll Variables check box, when recording activity in scrolls and grids, the Test Recorder will replace the row number suffix *\$n* by the selected PTF variable. For example if the field is FIELDNAME\$0, PTF will record FIELDNAME\$scr1.

See [Scroll](#)

- Use Page Expand

If you select the Use Page Expand check box, when you click an image to expand a page section or scroll area, instead of recording the image click, PTF will record the page.expand action.

See [Page](#)

## Using the Log Viewer

Whenever you run a test, PTF creates an execution log. The log is located in PTF Explorer under the test name, in the log folder specified in Execution Options.

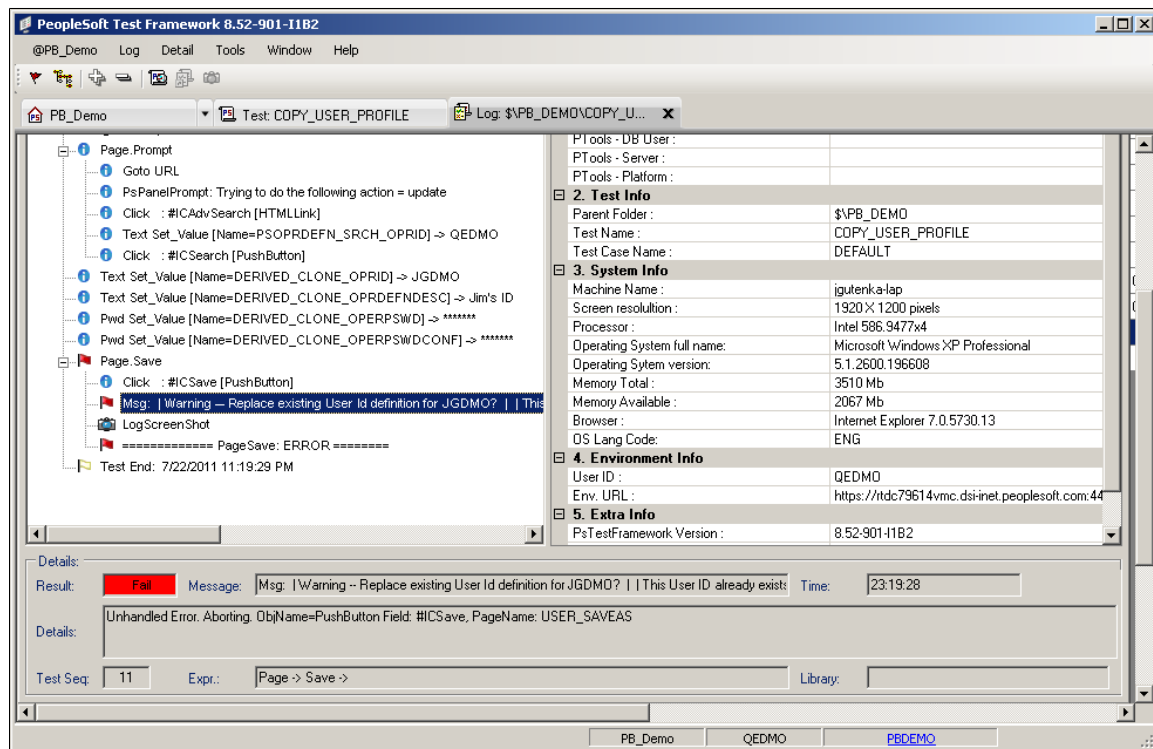
After you run a test, PTF automatically displays the log in the Log Viewer.

You can also view a log by opening it from PTF Explorer.

This example shows the Log Viewer:

### Image: Log Viewer

This example illustrates the fields and controls on the Log Viewer. You can find definitions for the fields and controls later on this page.



The Log Viewer has three panes:

- The left pane displays the log details.

Typically, the log will contain one high-level entry for each step in the test.

- The right pane displays the execution options that were used for the test.
- The bottom pane displays details about the selected entry in the log.

## Log Viewer Menus

The following menus appear when the Log Viewer has focus. Note that many menu commands are specific to the currently selected item.

This table describes the Log menu commands:

<b>Log Menu Command</b>	<b>Usage</b>
Find	Find text within a log.
Expand All	Expands all the selections in the log.
Collapse All	Collapses all the selections in the log.
Change Log View	Toggles between a view that shows log results as colored flags and a view that shows log results as shaded labels.
Highlight Errors	Highlights log entries with errors in yellow.
Copy Link to Clipboard	Copies a link to the log to the clipboard.  You can send this information to another user, who can use the Window, Quick Open feature to open the log without having to navigate to it in PTF Explorer.
Export	Exports a log to an XML file.

This table describes the Detail menu commands:

<b>Detail Menu Command</b>	<b>Usage</b>
Go to Test Step	Accesses the test and selects the step that corresponds to the selected log entry.
Open Link	Opens the application URL in the browser or opens an external file, such as a DataMover log.
Open Screenshot	Opens the screen shot that corresponds to the selected log entry.

This table describes the Window menu commands:

<b><i>Window Menu Command</i></b>	<b><i>Usage</i></b>
Quick Open	Using information from the Copy Link to Clipboard command, quickly opens a log without having to navigate to the log in PTF Explorer.
Close All	Closes all open windows.

## **Related Links**

[Reviewing Test Logs](#)

[Interpreting Logs](#)



## Chapter 4

# Creating Tests and Test Cases

---

## Creating Tests

This section discusses how to:

- Create a new folder.
- Create a new test.
- Name tests.
- Copy a test.
- Rename a test.
- Rename a folder.

## Creating a New Folder

Each test, along with the related test cases and logs, is stored in a folder in the PTF Explorer tree structure.

To create a new folder:

1. In PTF Explorer, highlight the folder in which you want to create the new folder or highlight Home to create the folder at the root level.
2. Select Create, Folder.
3. Enter a new folder name.
4. Click OK.

---

**Note:** Folder names must not contain the following characters:  
space & ? / \ \* < > ' "

---

## Creating a New Test

To create a new test:

1. Highlight a folder in PTF Explorer.
2. Select Create, Test.

The Test Editor launches with a new test.

3. (Optional) In the Test Descr field, enter a description for the test case.

4. (Optional) Click the Test Properties icon to enter a long description of the test case.

It is a good practice to provide a good description for a test, such as a description of the product, feature, or business process being tested. Test names are limited in length and provide little information.

5. (Optional) Click the Test Comment to add comments for the test.
6. Select Test, Save or click the Save button in the toolbar.
7. Enter a name for the new test.
8. Click OK.

## Naming Tests

These rules apply to test names:

- Test names and test case names are limited to 30 characters in length.
- Test names and test case names can consist of letters, numbers, and underscores, but they must begin with a letter.
- PeopleSoft Test Framework (PTF) converts test names and test case names to uppercase.
- Two tests in the same database instance must not have the same name, even if they reside in different folders.

Because PTF data resides in the application database, conflicts may occur if PTF users or administrators attempt to copy tests or test cases from one database to another database containing tests or test cases with the same name.

## Copying a Test

To copy a test:

1. Highlight a test in the PTF Explorer.
2. Select Edit, Copy or press CTRL-C to copy the test.
3. Highlight the folder where the copy of the test is to be located.
4. Select Edit, Paste or press CTRL-V to paste the test.
5. Enter a name for the new test.

When you copy and paste a test the test cases are copied as well, but not the logs. When you cut and paste a test the logs are moved also.

## Renaming a Test

A PTF Administrator or Editor can rename a test, however the test name must be unique to the database instance. A PTF User can only rename tests within the myFolder folder. Renaming a test or test case will update the test or test case name in all tests that make a call to the renamed test or test case.



To rename a test:

1. Highlight a test in the PTF Explorer.
2. Right-click and select Rename or select Edit, Rename from the menu.
3. Enter the new name and click OK.

The test is renamed.

## Renaming a Folder

A PTF Administrator or Editor can rename a folder, however the folder name must be unique within that level of the PTF Explorer tree. Before you can rename a folder, you must close all of the tests that are associated with that folder.

To rename a folder:

1. In PTF Explorer, highlight the folder you want to rename.
2. Right-click and select Rename or select Test, Rename from the menu.
3. Enter the new folder name and click OK.

---

**Note:** Folder names must not contain the following characters:  
space & ? / \ \* < > ' "

---

---

## Recording Tests

When you record a test, PTF monitors each action you perform in the target application and creates a corresponding step in the test.

PTF Recorder populates these fields for each step:

- Seq
- ID
- Active
- Type
- Action
- Recognition
- Parameters
- Value

This is an example of test steps:

### Image: Example of Test Steps

This example illustrates the fields and controls associated with the test steps. You can find definitions for the fields and controls later on this page.

Seq	ID	Comment	Active	Scroll ID	Type	Action	Recognition	Parameters	Value
1	1		<input checked="" type="checkbox"/>		Browser	Start_Login			
2	28		<input checked="" type="checkbox"/>		Browser	FrameSet			
3	29		<input checked="" type="checkbox"/>		Text	Set_Value	Name=userid		PTDOCB
4	30		<input checked="" type="checkbox"/>		Pwd	Set_Value	Name=passwd		1ENC29CDD0008E830562C4010DE2C487016EC80509EEC
5	31		<input checked="" type="checkbox"/>		Button	Click	Name=Submit		
6	32		<input checked="" type="checkbox"/>		Link	Click	id=phnavbca_PORTAL_ROOT_OBJECT		
7	33		<input checked="" type="checkbox"/>		Link	Click	Name=idra_PT_PEOPLETOOLSIndex=0		
8	34		<input checked="" type="checkbox"/>		Link	Click	id=idra_PT_SECURITY		
9	35		<input checked="" type="checkbox"/>		Link	Click	id=idra_PT_PERMISSIONS_ROLES		
10	36		<input checked="" type="checkbox"/>		Link	Click	id=idra_PT_USER_PROFILES		
11	37		<input checked="" type="checkbox"/>		Link	Click	innerText=User ProfilesIndex=1		
12	38		<input checked="" type="checkbox"/>		Browser	FrameSet	TargetContent		
13	39		<input checked="" type="checkbox"/>		Page	Prompt	MAINTAIN_SECURITY USERMAINT GBL		update
14	40		<input checked="" type="checkbox"/>		Page	PromptOk			
15	41		<input checked="" type="checkbox"/>		Page	Prompt	MAINTAIN_SECURITY USERMAINT GBL		update
16	42		<input checked="" type="checkbox"/>	2	Scroll	Action		ret=variable1	ins
17	43		<input checked="" type="checkbox"/>		Variable	Set_Value	test		Test1
18	2		<input checked="" type="checkbox"/>		Browser	FrameSet			
19	3		<input checked="" type="checkbox"/>		Pwd	Set_Value	Name=passwd		1ENC1EED306F6AFC3A3E9F980D86288A9ACECC0DEF
20	4		<input checked="" type="checkbox"/>		Button	Click	Name=Submit		
21	5		<input checked="" type="checkbox"/>		Text	Set_Value	Name=SEARCH_TEXTIndex=1		
22	6		<input checked="" type="checkbox"/>		Div	Click	ClassName=ptnav2oggleIndex=72		
23	7		<input checked="" type="checkbox"/>		Div	Click	ClassName=ptnav2oggleIndex=78		
24	8		<input checked="" type="checkbox"/>		Link	Click	innerText=Pivot Grid Wizard		
25	9		<input checked="" type="checkbox"/>		Browser	FrameSet	TargetContent		

Seq and ID are system-generated fields.

Recognition, Parameters, and Value are not used with some actions, such as Browser.Start or Page.Save.

The Comment field is populated by the test developer to document the test.

See [Using the Test Editor](#).

## Test Action Tools

In addition to simply recording your interaction with the target application, the test recorder enables you to add steps to perform the following functions:

- Verify the value in a page control.
- Check for the existence of a page element.
- Get a property of a page element.
- Populate a variable.
- Insert an entry in the execution log.
- Insert a conditional construct.
- Reference scrolls.
- Reference HTML table cell contents.
- Add or modify step comments.

## Related Links

[Using the PTF Test Recorder](#)

[PTF Test Language](#)

## Recording a Test

To record a test:

1. Create a new test or open an existing test.
2. If you are recording within an existing test, highlight a test step. The system inserts the steps in the new recording following the highlighted step. If you are recording a new test, recording typically begins at Step 2. By default, Step 1 is Browser.Start, or Browser.Start\_Login, depending on your configuration options.
3. With a test open, select Test, Open Test Recorder or click the Show Test Recorder button in the toolbar.
4. The PTF Test Recorder toolbar appears.

See [Using the PTF Test Recorder](#).

5. *Hook* a browser, that is, associate a PeopleSoft application browser with the test.

To hook a browser, you can either:

- Click the Start Web Client icon on the recorder toolbar. This starts the web browser with the default test application URL from the current execution option..
- Select a browser window with the test application open and hook the application by dragging the Select Browser icon to the browser window.

---

**Note:** PTF will only hook a browser that was initiated by PTF, either by using the Start Web Client icon or by running a test.

---

6. Click the Start Recording icon in the Test Recorder toolbar to begin recording.
7. Perform the test steps in the PeopleSoft application.
8. As needed, insert additional steps using the Test Recorder test action tools.
9. Modify steps or add step comments using the Test Recorder step modification tools.
10. Click the Stop Recording icon in the Test Recorder toolbar to end the recording and write the steps to the test.
11. Save the test.

### Related Links

[Using the PTF Test Recorder](#)

[Defining PTF Configuration Options](#)

---

## Opening Tests

This section discusses how to:

- Open tests with PTF Explorer.
- Open test assets using the Quick Open menu.

## Opening Tests with PTF Explorer

You can open a single test or multiple tests with PTF Explorer.

### Opening a Single Test

To open a single test with PTF Explorer:

1. Expand folders to navigate to the desired test.
2. Highlight the test.
3. Use one of the following methods to open the test:
  - Right-click and select Open.
  - Select Test, Open from the PTF Explorer menu.
4. The test opens, and the test editor is the active window.

### Opening Multiple Tests

To open multiple tests with PTF Explorer:

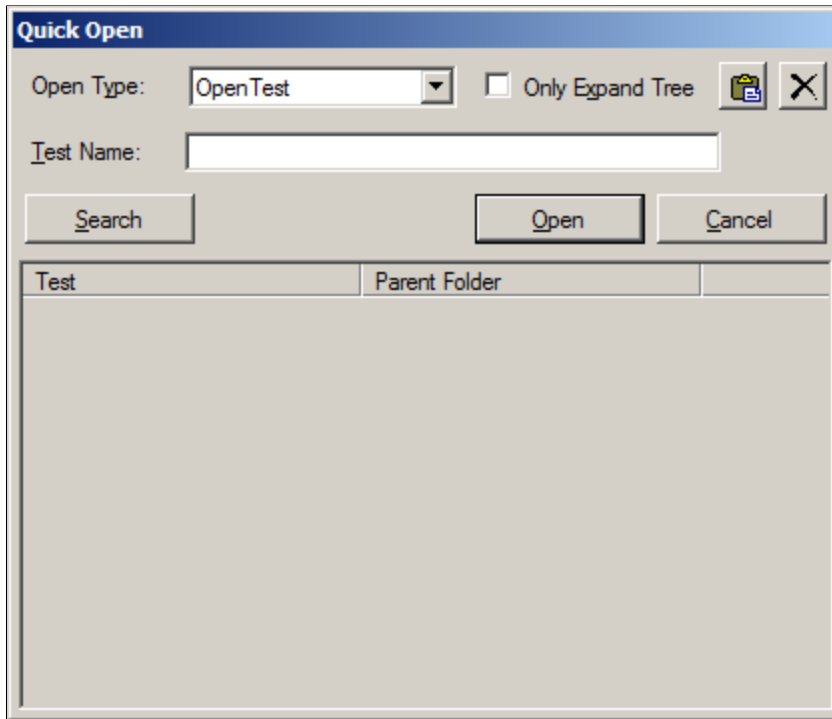
1. Expand the tree folders to view the desired tests.
2. Select each test that you want to open (use Ctrl-Click to multi-select).
3. Use one of the following methods to open all of the selected tests:
  - Right-click and select Open.
  - Select Test, Open from the PTF Explorer menu.
4. All of the tests open.

## Opening Tests Assets with the Quick Open Dialog Box

Use the Quick Open dialog box to search for and open one or more test assets. To access the Quick Open dialog box, select Window, Quick Open.

### Image: Quick Open Dialog Box

This image illustrates the fields and controls on the Quick Open dialog box.



The following fields and controls are available on the Quick Open dialog box.

#### Open Type

Select the type of test asset to open. Options are:

- *Open Test*
- *Open Case*
- *Open Log*

#### Only Expand Tree

Select this check box to only expand the tree folder the asset is associated with, not load the test asset.

#### Test Name

Enter the test name.

#### Case Name

This field is available only when Open Type is set to *Open Case*.

Enter the test case name.

#### Log Folder

This field is available only when Open Type is set to *Open Log*.

Enter the name of the log folder.

<b>Log Name</b>	<p>This field is available only when Open Type is set to <i>Open Log</i>.</p> <p>Enter the name of the log.</p>
<b>Search</b>	<p>Click to search for tests that <i>contain</i> the value entered in Test Name. Partial matches are supported for Test Name when using the Search button.</p> <p>Matching tests appear in the grid. To open one or more tests in the grid, select the check box adjacent to the test name, then click Open.</p>
<b>Open</b>	<p>Click to open the test asset.</p> <p>An exact match is required if you do not use Search before you click Open.</p>

---

## Creating Test Cases

Often, you will want to run the same test multiple times using different values in the Value column. Test cases enable you to associate different sets of data with a test. You can view and edit both the test and test case in a single unified window.

### Creating a New Test Case

To create a new test case:

1. With a test open, click the New button to the right of the Test Case field.
2. Enter a name for the new test case.
3. (Optional) In the Test Case Descr field, enter a description for the test case.
4. (Optional) Click the Test Case Properties icon to enter a long description of the test case.

It is a good practice to provide a good description for a test case. Test names are limited in length and provide the user with little information.

5. (Optional) Click the Test Case Comment icon to add a comment for the test case.
6. The new test case provides a set of new, empty Value fields for all the steps of the test.

Enter a new value for each step that requires a value.

7. Save the test case.

### Image: New test case with blank values

This example illustrates a new test case with blank values.

The screenshot shows the 'Test: COPY\_USER\_PROFILE' window. It has two tabs: 'Test Information' and 'Test Case Information'. The 'Test Information' tab is active, showing 'Name: COPY\_USER\_PROFILE' and 'Description:'. The 'Test Case Information' tab is also visible, showing 'Name: [3] NEW\_CASE' and 'Description:'. Below the tabs is a toolbar with icons for Cut, Copy, Paste, Active All, Insert Step, Delete Step, and Step Information. The main area is a table with columns: Seq, ID, Comment, Active, Scroll ID, Type, Action, Recognition, and Value. The table contains 17 rows of test steps, each with a sequence number, ID, comment, active status, scroll ID, type, action, recognition, and value. The first row is highlighted in blue.

Seq	ID	Comment	Active	Scroll ID	Type	Action	Recognition	Value
1	1		<input checked="" type="checkbox"/>		Browser	Start_Login		
2	2		<input type="checkbox"/>		Link	Click	innerText=Sign in to PeopleSoft	
3	3		<input type="checkbox"/>		Text	Set_Value	Name=userid	
4	4		<input type="checkbox"/>		Pwd	Set_Value	Name=pwd	
5	5		<input type="checkbox"/>		Button	Click	Name=Submit	
6	6		<input type="checkbox"/>		Link	Click	id=fldra_PT_PEOPLETOOLS	
7	7		<input type="checkbox"/>		Link	Click	id=fldra_PT_SECURITY	
8	8		<input checked="" type="checkbox"/>		Browser	FrameSet	TargetContent	
9	9		<input type="checkbox"/>		Link	Click	Name=defaultinnerText=Copy User Profiles	
10	10		<input checked="" type="checkbox"/>		Page	Prompt	MAINTAIN_SECURITY.USER_SAVEAS.GBL	
11	11		<input checked="" type="checkbox"/>		Text	Set_Value	Name=PSOPRDEFN_SRCH_OPRID	
12	12		<input checked="" type="checkbox"/>		Page	PromptOk		
13	13		<input checked="" type="checkbox"/>		Text	Set_Value	Name=DERIVED_CLONE_OPRID	
14	14		<input checked="" type="checkbox"/>		Text	Set_Value	Name=DERIVED_CLONE_OPRDEFNDESC	
15	15		<input checked="" type="checkbox"/>		Pwd	Set_Value	Name=DERIVED_CLONE_OPERPSWD	
16	16		<input checked="" type="checkbox"/>		Pwd	Set_Value	Name=DERIVED_CLONE_OPERPSWDCONF	
17	17		<input checked="" type="checkbox"/>		Page	Save		
*			<input checked="" type="checkbox"/>					

## Creating a Test Case With Values

For convenience, you may want to create a test case with the Value column populated with the values from the original test or from another test case. Then, you can edit the values in the new test case.

**Note:** The test case associated with the original test is named DEFAULT. Every test has one test case named DEFAULT.

You can select an existing test case from the Test Case drop-down list box.

PTF displays the number of test cases associated with the test, including the DEFAULT test case, next to the Test Case field label.

To create a test case with values:

1. With a test case open, select Test, Test Case Save As.
2. Enter a name for the new test case.
3. (Optional) Enter a short description and a long description for the test case.
4. Highlight each value you want to change and enter a new value.

5. Save.

---

## Exporting and Importing Test Cases

You can create or modify a large number of test cases by exporting test cases to a file, editing the file, and then importing the file back into the test.

You can export a text file using the following delimiter characters:

- Comma
- Semicolon
- Vertical pipe
- Tab

### Exporting Test Cases

To export test cases:

1. With a test open, select Test, Export.
2. Specify a location for the file.
3. Select a separator character.

---

**Note:** The default separator character is a comma, which is also the default separator used by spreadsheet programs. If any of the values in your test case contain commas, the value will be split into separate fields. If you have commas in your test case values, choose a different separator.

---

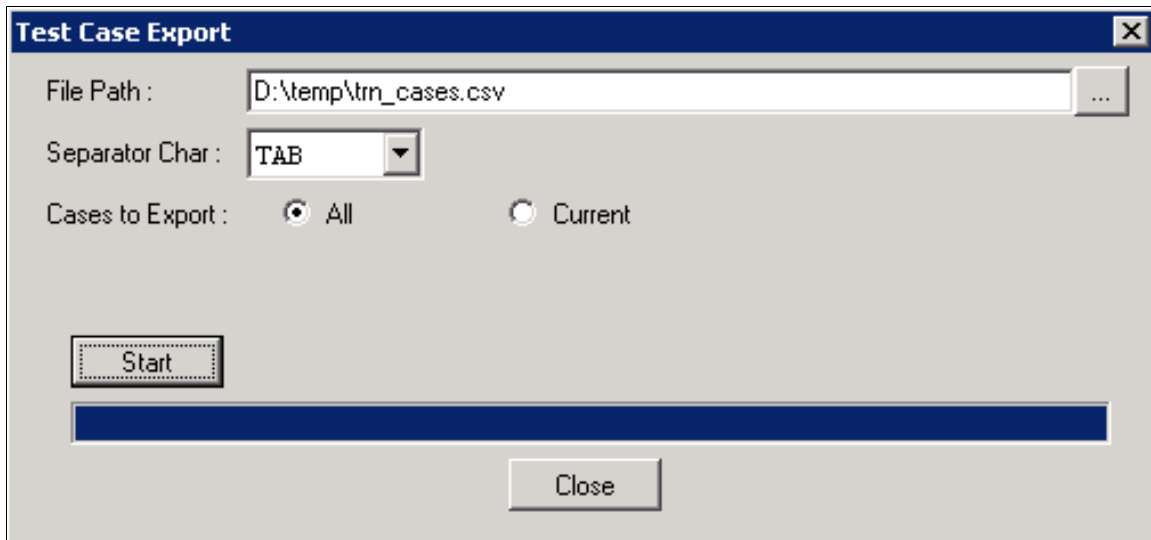
4. Specify whether to export one or all test cases.
5. Click Start.



The bar along the bottom of the dialog box denotes the progress of the export.

**Image: Example of export using a tab delimiter for all test cases**

This example illustrates export using a tab delimiter for all test cases.



## Importing Test Cases

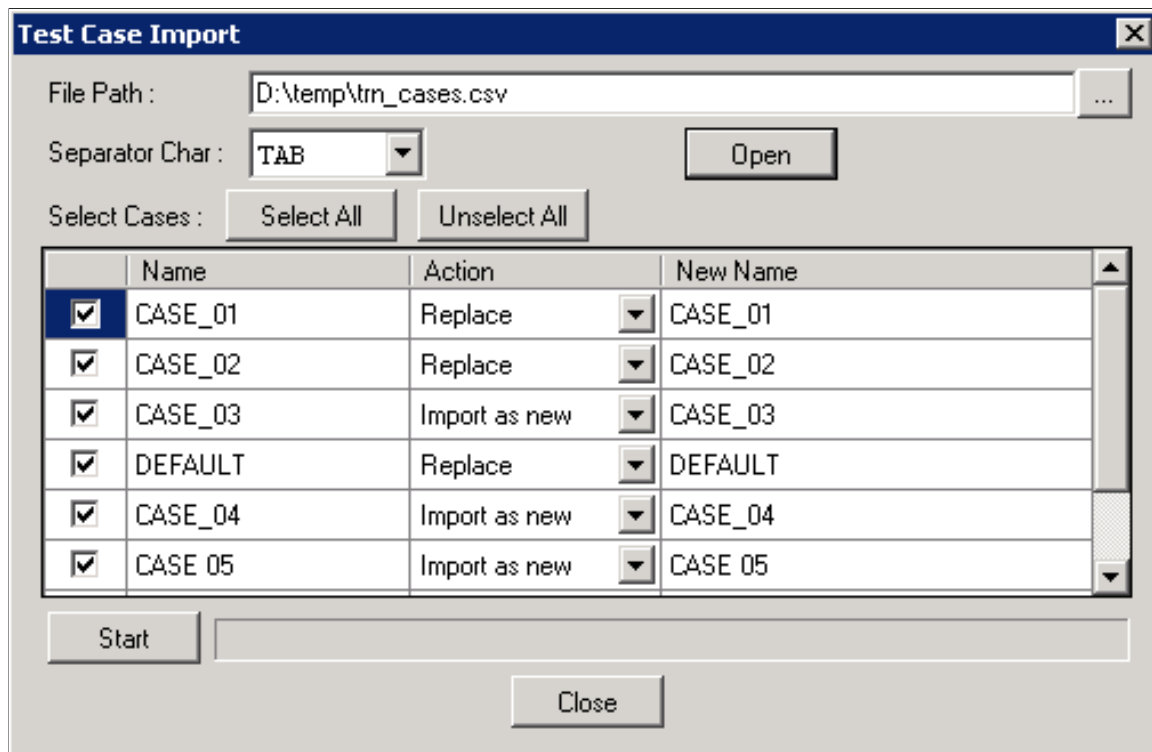
To import test cases.

1. In PTF, with a test open, select Test, Import.
2. Enter the file path or browse to the file.
3. Specify the separator character.

- Click Open to display a list of test cases in the file.

### Image: Test Case Import dialog box

This example illustrates the fields and controls on the Test Case Import dialog box. You can find definitions for the fields and controls later on this page.



If the test case already exists in the test, the action is set to Replace. If the test case does not exist in the test, the action is set to Import as new. If you change the action to Import as new for an existing case, you must also enter a new test name in New Name field.

- Select the test cases to import.
- Click Start.

## Executing Tests

This section describes how to execute tests and test cases.

### Executing a Test

To execute a test:

- With a test open in PTF, select Test, Run.

Alternatively, you can press F5 or click the Run button.

- If Yes is specified in the Prompt for Options field for the default execution option, then the Execution Options dialog box appears.

Select an execution option from the list and click Accept.

PTF opens the PeopleSoft application specified in Execution Options and executes the steps in the test.

3. After the test executes, PTF opens the test log in the Log Viewer.

---

**Note:** When PTF executes a test it disables Num Lock and Caps Lock on your keyboard and restores them when the test completes. If the execution terminates abnormally, the test does not complete, or hangs up, and PTF does not restore Num Lock and Caps Lock. Select Test, End or click the End icon in the toolbar to end the test and restore Num Lock and Caps Lock.

---

## Related Links

[Reviewing Test Logs](#)

## Executing a Test Case

To execute a test case:

1. With a test open in PTF, select a test case from the Test Case drop-down list.

If you do not select a test case, the system uses the DEFAULT test case.

Alternatively, you can open a test case from PTF Explorer.

2. Select Test, Run.
3. Review the log in the Log Viewer.

## Related Links

[Reviewing Test Logs](#)

## Executing a Test from a Specific Step

You can start execution from a specific step using the Run from Step option in the Test menu.

---

**Important!** You are responsible for completing any required preceding steps when executing a test using the Run from Step command, such as Browser.Frameset, assigning variables, and hooking the browser, for example.

---

To execute a test from a specific step:

1. With a test open in PTF, select Test, Run from Step.

Alternatively, you can press F6.

2. In the Run from Step dialog box, enter or select the step sequence number from which to begin test execution, and click OK.

If the specified sequence number does not exist, test execution begins at either the next highest sequence number, or the last test step sequence, whichever is the lower value.

If the specified sequence number is an inactive step, then test execution begins with the next highest sequence number.

3. After the test executes, PTF opens the test log in the Log Viewer.

The log file will include information about which step the test was started from.

## Executing a Test from the Command Line

You can execute a test from the command line using the PsTestFW command.

### Syntax

Use this syntax to execute a test using the existing environment connection:

```
PsTestFw -CD=ConnectionName -CP=ConnectionPassword -TST=TestName
-TTC=TestCaseName [-TL=Line X(integer)] [-PFX=Prefix] -EXO=ExecutionOption [-LOG=Log⇒
FileName]
```

Use this syntax to execute a test using specified environment connection parameters:

```
PsTestFw -CS=Server -CNO=NodeName -PS=ProxyServer -PU=ProxyUser -PP=ProxyPassword
-CO=UserName -CP=ConnectionPassword -TST=TestName -TC=TestCaseName [-TL=Line X(int⇒
eger)]
[-PFX=Prefix] -EXO=ExecutionOption [-LOG=LogFileFileName]
```

### Parameters

**-CD=** Specify the name of the environment signon to use for connection. This is the Database Name you would select in the PeopleSoft Test Framework Signon dialog box when signing on to PTF.

The environment signon settings are stored in the environments.xml file in the PTF data directory (C:\Documents and Settings\<User>\Application Data\PeopleSoft\PeopleSoft Test Framework by default). If the environment connection data is not set in the environments.xml file, then you can explicitly specify the connection parameters. See the following table for a description of connection parameters.

See [Creating a Connection to a PTF Environment](#).

**-CP=** Specify the user password.

**-TST=** Specify the test name.

**-TC=** Specify the test case name.

**-TL=** (Optional) Specify the line number from which to start the test.

**-PFX=** (Optional) Specify the prefix.

See [#PREFIX#](#).

**-EXO=** Specify the execution option to be used in the execution.

---

**Note:** The name of the execution option must not contain the following characters:  
space & ? / \ \* < > ' "

---

**-LOG=** (Optional) Specify the name for the log. The default is `unattended.log`.

If you do not use the `-CD=` parameter to specify the connection data, use the parameters in the following table:

**-CS=** Specify the server:port to connect to. This is the Server:Port value you would enter in the PeopleSoft Test Framework Signon dialog box when signing on to PTF.

**-CNO=** Specify the node name.

**-CO=** Specify the user name.

**-PS=** (Optional) Specify the ProxyServer:Port.

**-PU=** (Optional) Specify the proxy user. If you use network authentication, use the DOMAIN\USER format.

**-PP=** (Optional) Specify the proxy password.

## Example

The following example uses the `-CD=` parameter to set connection parameters:

```
PsTestFw -CD=QE851 -CP=VP1 -TST=TEST_CMD_LINE -TC=DEFAULT -PFX=Prefix
-EXO=QE851_No_Folder -LOG=my_run_log
```

The following example explicitly sets connection parameters:

```
PsTestFw -CS=rtdc79637vmc:8643 -CNO=PT_LOCAL -PS=ProxyServer:2345 -PU=mydomain\usern=
ame -PP=pwd123 -CO=VP1 -CP=VP1 -TST=TEST_CMD_LINE
-TC=DEFAULT -PFX=Prefix -EXO=QE851_No_Folder -LOG=my_run_log
```

## Log File

The execution will generate an output log file in the PTF data directory (C:\Documents and Settings\\Application Data\PeopleSoft\PeopleSoft Test Framework by default).

If the log file exists it will be overwritten.

This is an example of a log file:

```
<execution>
  <Started>2014-06-18 04:41:46</Started>
  <Param>
    <Database>L921PDVL</Database>
    <TestName>DR_DUMMY_SHELL</TestName>
    <TestCase>DEFAULT</TestCase>
    <ExecOpt>L921PDVL</ExecOpt>
  </Param>
```

```

<Status>Failed</Status>
<Test>
  <Exec1>
    <Name>DR_DUMMY_LOOP</Name>
    <Case>DEFAULT</Case>
    <LogLine15>case is not DEFAULT2</LogLine15>
    <LogLine16>Execution stopped by Execution.Stop_On_Error: 6/18/2014 4:41:54 PM=>
  </LogLine16>
  <Status>Failed</Status>
</Exec1>
  <Exec2>
    <Name>DR_DUMMY_LOOP</Name>
    <Case>DEFAULT2</Case>
    <Status>Passed</Status>
  </Exec2>
  <Exec3>
    <Name>DR_DUMMY_LOOP</Name>
    <Case>DEFAULT3</Case>
    <LogLine44>case is not DEFAULT2</LogLine44>
    <LogLine45>Execution stopped by Execution.Stop_On_Error: 6/18/2014 4:41:55 PM=>
  </LogLine45>
  <Status>Failed</Status>
</Exec3>
  <LogFolder>TEST</LogFolder>
  <LogName>4. PS 2014-06-18 16:41</LogName>
  <Message>Execution stopped by Execution.Stop_On_Error: 6/18/2014 4:41:55 PM</Message>
</Test>
</execution>

```

## Return Code Option For PTF Command Line Execution

The iRetCode command returns the status of test execution from the command line.

The syntax for this command is:

```

iRetCode= PsTestFw -CS=<Environment_server_port> -CNO=<optional_Environment_Node_ID>
>
-CO=<Environment_User_ID> -CP=<Environment_User_Password> -TST=<ShellTest_Name>
-TC=<Test Case Name> -EXO=<Execution_options> -LOG=C:\Temp\LOG1.xml

```

Return values are:

<b>-1</b>	Failed
<b>-2</b>	Not Completed-FatalError
<b>0</b>	Passed
<b>-3</b>	Starting
<b>-10</b>	Else

---

## Reviewing Test Logs

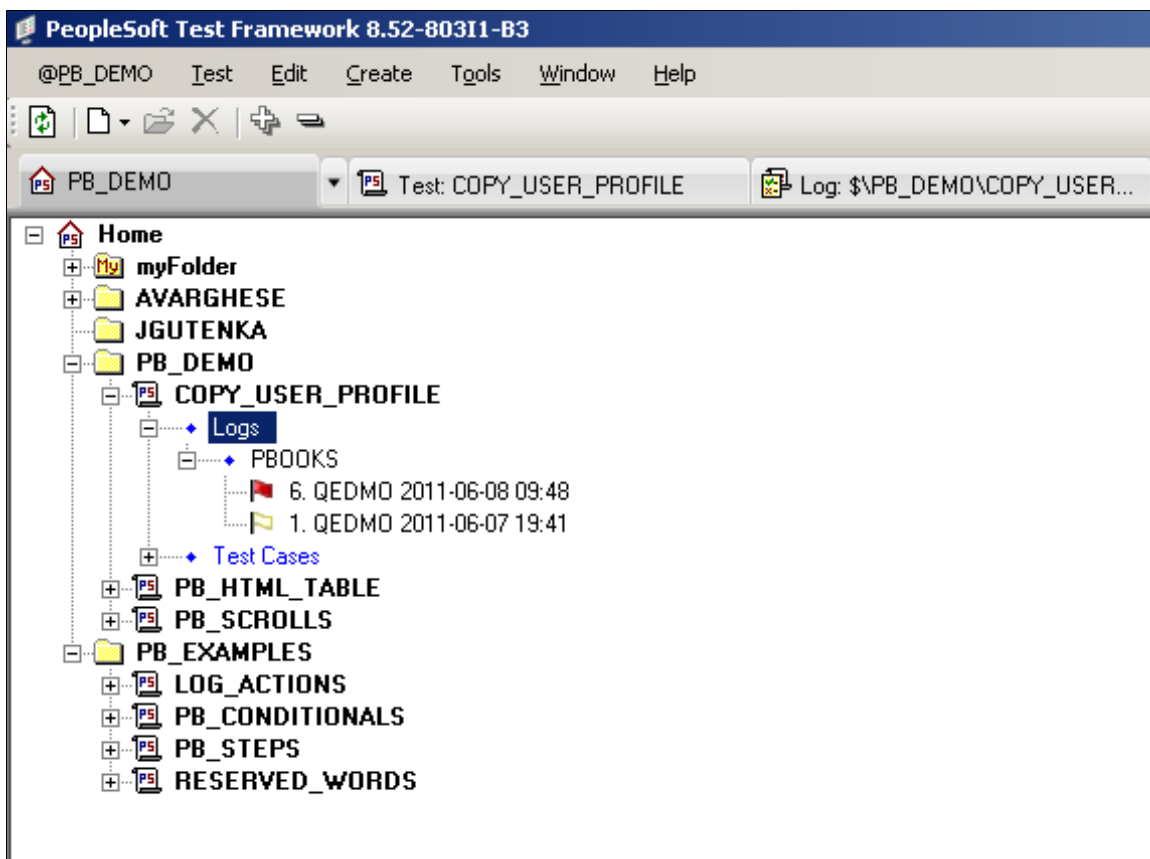
Whenever you run a test, PTF creates an execution log entry. The log is located in PTF Explorer under the test name, in the log folder specified in Execution Options.

After you run a test, PTF automatically displays the log in the Log Viewer.

You can also view a log by opening it from PTF Explorer.

**Image: Example of PTF Explorer Showing Log Entries in the Logs Folder**

This example illustrates log entries in the Logs folder of PTF Explorer.



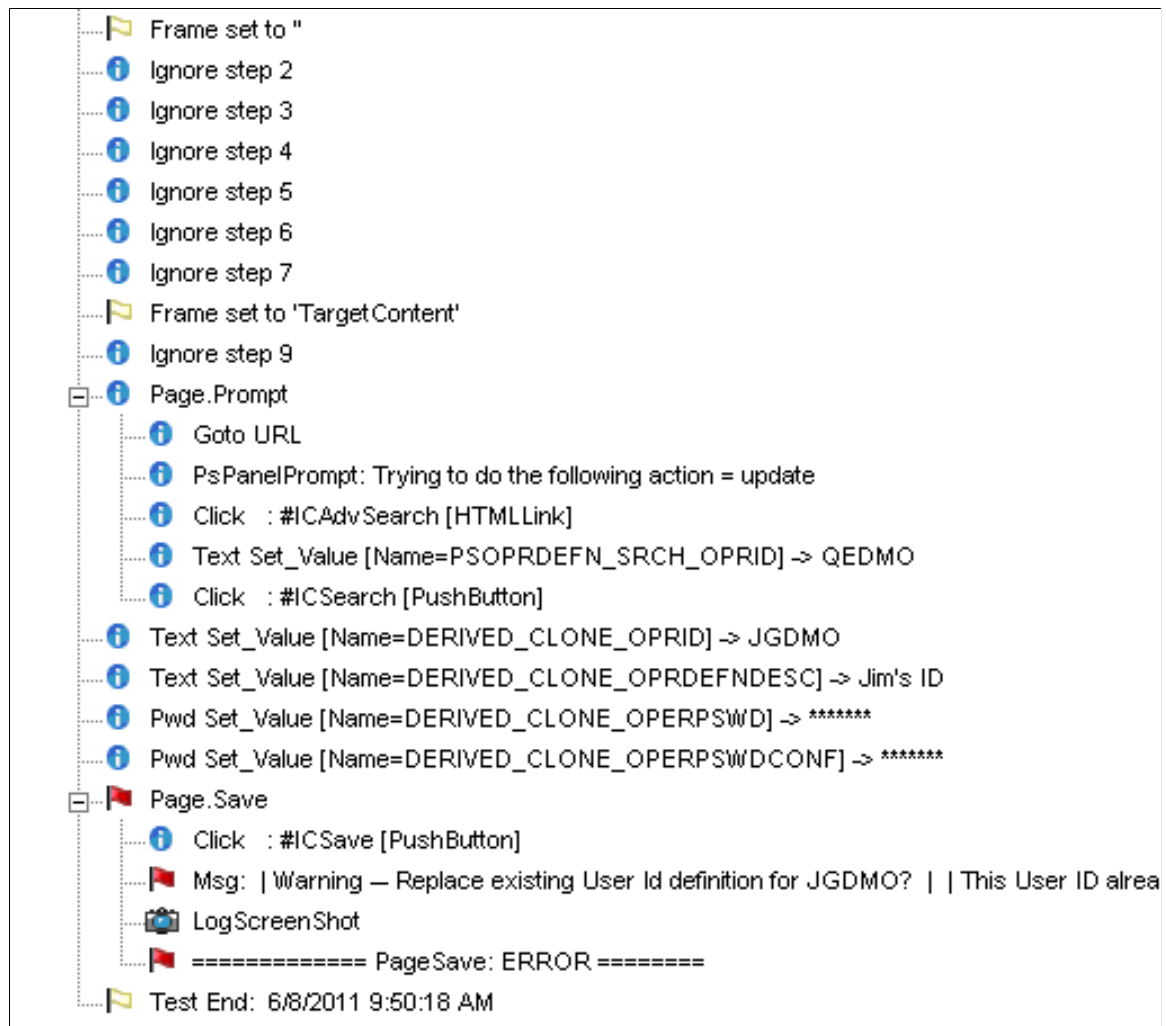
To open a log from PTF Explorer, do one of the following:

- Highlight a log entry and select Test, Open.
- Double-click a log entry.

- Right-click a log entry and select Open.

### Image: Example of Log Entries in a Test Log

This example illustrates log entries in a test log. You can find icon definitions later on this page.



Typically, the Log Viewer includes one high-level entry for each step in the test. Entries for complex steps appear in collapsible sections that can be expanded to view the additional details.

An icon or shaded label appears next to each log entry, indicating the success state of the associated step:



Information message only.



Information message only.



Step was successful.



Step was successful, but with a warning.





Step failed.



The test encountered a condition that it was not configured to handle, or the test encountered an error while PTF was configured to stop on all errors.

---

**Note:** Highlight a log entry and select Detail, Go to Test Step or right-click and select Go to Test Step to open the test with the corresponding step selected.

---

### Related Links

[Interpreting Logs](#)

[Reviewing Test Logs](#)

---

## Exporting Test Logs to XML

PTF provides the ability to export test log to XML. Once the logs have been exported to XML, the user can compare the results in a text editor, such as NotePad or EditPlus. The user can select which fields to exclude from the XML.

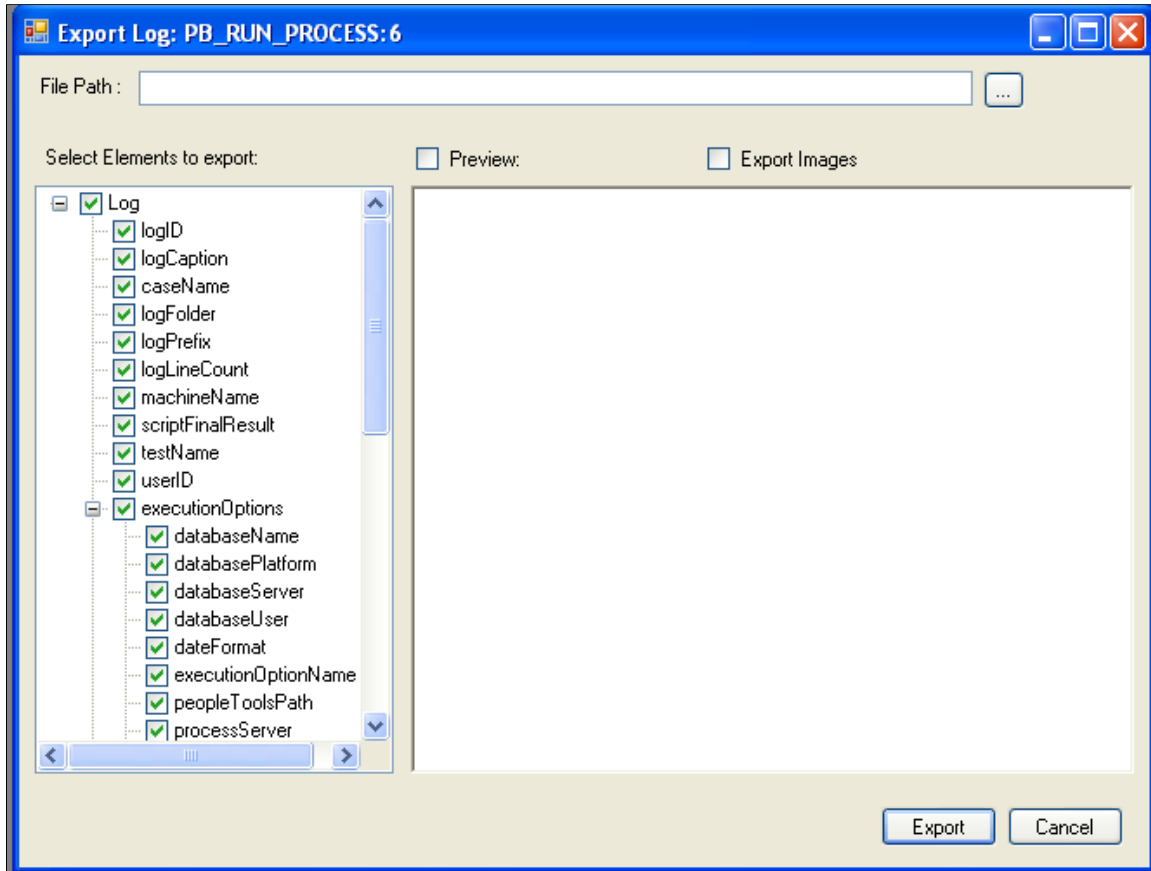
To export a test log to XML:

1. In PTF Explorer, open the logs folder.
2. Right-click on a specific log.
3. Select Export.

The Export Log dialog box is displayed:

### Image: Export Log Dialog Box

This example illustrates the fields and controls on the Export Log Dialog Box. You can find definitions for the fields and controls later on this page.



On the Export Log dialog, the user can see the structure(schema) of the Log XML, include/exclude elements to export and set the order of the elements, also the user is able to preview the exported result.

By default, all the timestamp (lastUpdate element in the schema tree) fields are excluded, as well as extra information such as ExecutionOptions, LogParentLineID, and so forth.

#### File Path

Enter the file path. The file name is automatically generated based on the test name and log number. For example PB\_RUN\_PROCESS-LOG-6.xml.

#### Select Elements to Export Column

By default all items are selected, click the check box to deselect specific items.

#### Preview

Select this check box to preview the xml.

#### Export Images

Select this check box to include images in the exported file.

You can also set an option to automatically generate XML log files every time that tests are executed. For more information, see [Configuring Execution Options in PTF Client](#).

---

## Organizing Tests In PTF Explorer

This section discusses how to:

- Cut and paste multiple tests or folders.
- Delete multiple tests or folders.
- Expand or collapse multiple tests or folders.

### Cutting and Pasting Multiple Tests or Folders

PTF Administrators and PTF Editors can cut and paste tests and folders. A user with only the PTF User role is not able to cut folders that reside outside of the myFolder folder.

To cut and paste (move) multiple tests or folders:

1. In the PTF Explorer, select multiple tests and folders to move to a new location on PTF explorer tree.
2. Right-click and select Cut, or select Edit, Cut from the menu.
3. Select the desired target folder location on PTF explorer tree.
4. Right-click and select Paste, or select Edit, Paste from the menu.

All contents are moved to the target folder location.

### Deleting Multiple Tests or Folders

PTF Administrators and PTF Editors can delete tests and folders. A user with only the PTF User role is not able to delete folders that reside outside of the myFolder folder.

To delete multiple tests or folders:

1. In the PTF Explorer, select multiple tests and folders to delete.
2. Right-click and select Delete, or select Edit, Delete from the menu.
3. Click OK to confirm the delete.

The folders or tests are deleted.

### Expanding or Collapsing Tests and Folders

To expand or collapse multiple tests or folders:

1. In the PTF Explorer, select multiple tests and folders to expand or collapse.
2. Right-click and select Expand Selection or Collapse Selection,

PTF expands or collapses all selected tests and folders at the level of selection in the tree.



## Chapter 5

# Developing and Debugging Tests

---

## Using the Message Tool

This section discusses how to use the Message tool.

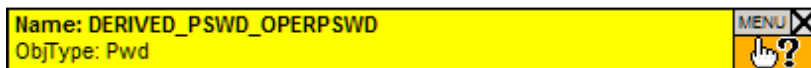
As you modify a test, you will often need to use the Message tool to capture details for a browser object. You can then use these details to modify a test step.

Select Tools, Message to open the Message tool.

Click and drag the Object Properties icon and hover over a browser object to view details about that object in the Message window.

### Image: Message Tool ID Values

This example illustrates Message tool ID values.



To copy and paste recognition information from the application browser to the PTF Test Editor, drag and drop the Object Properties icon onto a browser object. Object recognition details appear in the Message tool. Double-click the name in the Message tool to copy it to the clipboard. You can then paste the information into the Recognition field of a test step. To automatically copy each selection to the clipboard, select Menu, Auto Copy to Clipboard.

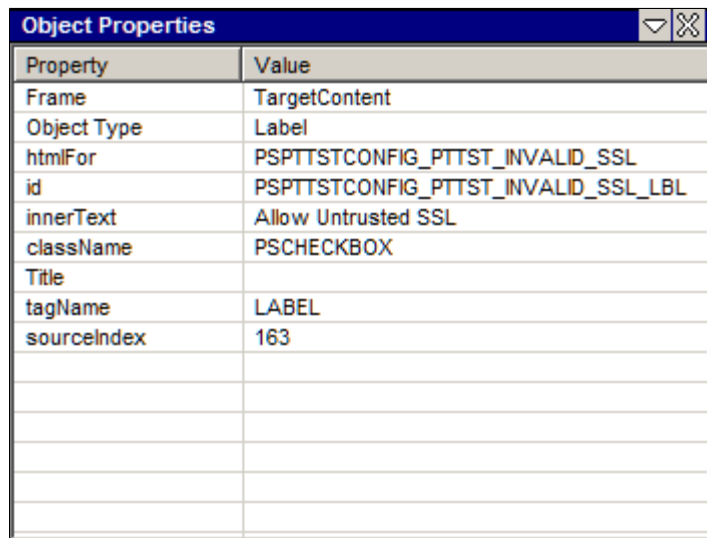
You can also use the Message tool to monitor test execution. The Message tool displays types, actions, IDs, and values for each step of a PeopleSoft Test Framework (PTF) test as the test executes.

## HTML Browser

To view additional details about a browser object, access the Message tool and select Menu, HTML Browser, Show. This example shows the HTML Browser Object Properties window:

### Image: Example of the HTML Browser

This example illustrates the HTML Browser Object Properties window.



Property	Value
Frame	TargetContent
Object Type	Label
htmlFor	PSPTTSTCONFIG_PTTST_INVALID_SSL
id	PSPTTSTCONFIG_PTTST_INVALID_SSL_LBL
innerText	Allow Untrusted SSL
className	PSCHECKBOX
Title	
tagName	LABEL
sourceIndex	163

The HTML Browser Object Properties window displays properties and values of HTML objects as you hover over them using the Object Properties icon. Double-click a line in the HTML Browser window to copy the text to the clipboard.

## Capturing index for non-unique objects using the HTML Browser

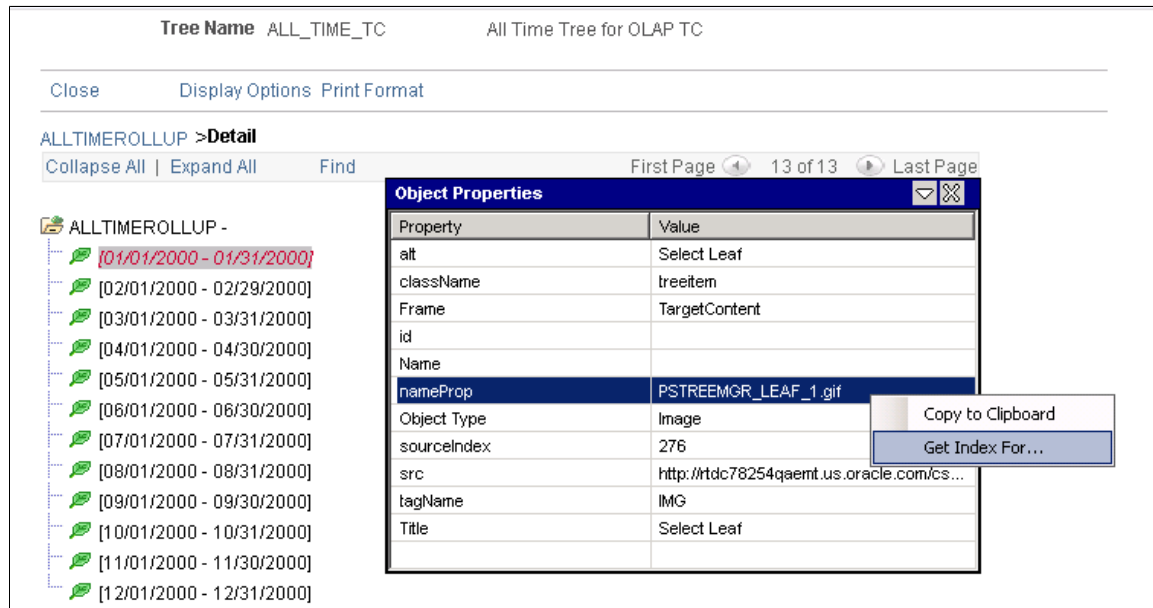
For certain objects that do not have enough of a unique identifier property, you can use the HTML Browser to capture the index during recording. An example of this would be leaves on a tree structure. To capture the index:

1. In PTF Client, select Tools > Message to open the Message tool.
2. Start your recording.
3. Open the tree to the desired location.
4. Click the Object Properties icon in the Message Toolbar and drag it to the leaf image on the tree.
5. Access the Message tool and select Menu > HTML Browser > Show.
6. Right-click on the nameProp in the Object Properties window and select Get Index for.

7. The index will be added to the object Properties.

### Image: Object properties Dialog Box

This example illustrates the Object properties Dialog Box displaying the properties for a leaf on a tree. To get the index, you will select Get Index For...



## Using Reserved Words

This section discusses how to use reserved words.

Reserved words enable you to access data available from the PTF program when a test is executed.

Reserved words are useful when data is not known before the test is executed. For example, suppose you have the following manual test instruction:

12. Enter the current date into the Voucher Creation Date field.

If, when you record the step, you enter the current date, then you will put specific, or static, data into the test, similar to the following example, which shows the data created by a test recorded on June 30, 2010:

### Image: Example of a Test Step with Static Data

This example illustrates a test step with static data for the date.

Text	Set_Value	Name=PA_PROP_VOUCH_CREAT_DT	06/30/2010
------	-----------	-----------------------------	------------

However, the test instruction calls for the *current date*, which may be different each time you run the test. Data that can change is called *dynamic* data. To make the test data in PTF dynamic, replace the recorded

data with the reserved word, **#TODAY**, which represents the date at the moment of test execution, as shown in this example:

### Image: Example of Test Step Using the #TODAY Reserved Word

This example illustrates a test step using the **#TODAY** reserved word.

Test	Set_Value	Name=PA_PROP_VOUCH_CREAT_DT	#TODAY
------	-----------	-----------------------------	--------

Other reserved words enable you to define specific actions in the Value field of a step.

For example, suppose you are required to test two very similar test scenarios:

1. Create a new pension calculation using the following parameters.
2. Open the pension calculation created earlier and verify that the parameters entered into the application are the same as those specified in the previous scenario.

You can meet this requirement by using a single test step with two test cases. The first test case might be named **CREATE** and the second named **VERIFY**.

In the **CREATE** test case, a step that sets the Calculation Description field might look like this:

### Image: Example of a Step that Sets a Value

This example illustrates a step that sets a value.

Test	Set_Value	PA_CALCULATION_DESCR	Sample pension calc
------	-----------	----------------------	---------------------

The **VERIFY** test case uses the reserved word **#CHECK#** in the Value field. Using the same step, the **#CHECK#** reserved word causes the **Set\_Value** action to behave like a **Verify** action, which satisfies the second test scenario. Rather than setting the value of the object, the same step now verifies it, as shown in this example:

### Image: Example of a Step that Verifies a Value

This example illustrates a step that verifies a value.

<input checked="" type="checkbox"/>	Test	Set_Value	PA_CALCULATION_DESCR	#CHECK#Sample pension calc
-------------------------------------	------	-----------	----------------------	----------------------------

## Related Links

[Creating Test Cases](#)

[Reserved Words](#)

## Using Variables

This section discusses how to use variables.

Variables enable you to store a value in one step and access that data in a subsequent step. Variables are useful when your test requires a value that will not be known until the test is executed.

Variables are always prefixed by an ampersand (&) – both when you set their value and when they represent a value.



Store a value for a variable either by placing the `ret=&varname` parameter in the Parameters field in a step that supports return values, or by using a `Variable.Set_Value` step.

You can refer to the values stored in a variable in two ways:

- Use the variable in the Recognition field of a `Conditional.If_Then` step or in the Parameter field for any step that takes a parameter.
- Use the variable in the Value field of any step that sets or verifies the value of an object on the page.

---

**Important!** Variables are not automatically initialized. If the variable is not assigned a value in either the recognition or value column, the value will be the variable name. For example, if the variable `&var1` was never initialized, it will return `&var1`.

---

For example, suppose you have the following test instructions for a test of the Maintain Proposal component:

1. From the Maintain Proposal page, make a note of the new proposal ID.
2. Click on the version ID link and verify that the same proposal ID appears on the Resource Estimate page.

The application generates a proposal ID when the test is executed, so it is not known ahead of time.

The following example shows one way to automate these steps using a variable. The first step gets the value of the Proposal ID field from the application and stores it to the `&propID` variable. The second step clicks the version ID link, which brings up the Resource Estimate page. The third step verifies the value of the Proposal ID field on the Resource Estimate page against the value saved in the `&propID` variable:

### Image: Example of Using a Variable

This example illustrates using a variable to verify the value of a property on a page.

Test	Get_Property	ID=GM_PROP_ID	prop=Value;ret=&PropID	
Link	Click	InnerText=V101		
Span	Verify	ID=GM_PROP_ID		&PropID

The length of PTF fields (Value, Recognition, Parameters) is limited to 254 characters. To construct a variable string that is longer than 254 characters, you will need to wrap the string into multiple variables and concatenate them for usage in verification or set value steps.

### Image: Example Using Multiple Variables for String over 254 Characters

This example illustrates the steps to create smaller variables and then concatenate the string for use in a `LongText.Verify` step.

Variable	Set_Value	&var1		First 254 character string
Variable	Set_Value	&var2		The remaining characters string
Variable	Set_Value	&var3		concat(&var1&&var2)
LongText	Verify	Name=PSU_INSTR_EXP_DESCRLONG		&var3

For additional examples of variable usage, see the “Test Language Reference” chapter, especially the `Conditional.If_Then` and `Variable.Set_Value` steps.

## Wrapping Variables in Quotes

Variable assignments, comparisons, and functions may use special characters (such as the equals sign, parentheses, and so forth) to manage text string operations. Quotes are necessary in these situations to help PTF distinguish strings that contain these characters from the actual operators themselves.

Quotes are only necessary in the following situations:

- Around text being assigned to a variable in the Recognition field.
- Around text being provided as a parameter of a function (in either the Parameters or Value field).
- Around text being used in a Conditional step in the Recognition field.

## Assigning Variables in the Recognition Field

Use the following guidelines when assigning variables in the Recognition field:

- Use quotes around all text strings.
- Use double quotes (""") to return one quotes character. When a final text string result is expected to include leading and trailing quotes characters, the parameters supplied should be lead and trailed by three quotes characters, for example: """"Hello"""".

---

**Note:** PTF will return an error ( unrecognized or illegal variable format) if the user fails to wrap a text string being assigned to a variable in quotes

---

This table displays examples of setting the variable &MyVar in the Recognition field and the expected result:

<b>Recognition</b>	<b>Expect Result</b>
&MyVar=&PriorVar	Contents of the &PriorVar variable
&MyVar="&PriorVar"	&PriorVar
&MyVar="Hello"	Hello
&MyVar="""Hello"""	""Hello""
&MyVar=Hello	error message

## Assigning Variables in the Value field

It is a good practice to assign variable values in the Value field (rather than the Recognition field) for the following reasons:

- It simplifies variable assignments.
- It reinforces habits that allow the user to take fuller advantage of dynamic PTF functionality such as Test Case data and reserved words (which are only recognized in the Value field).

Use the following guidelines when assigning variables in the Value field:

- Quotes are not necessary to identify a text string in the Value field for the purpose of a variable assignment step.
- The CONCAT() function should be used to return a text string containing special characters such as ampersands or pound symbols that could be interpreted as a variable or reserved word.

- Double quotes are generally not needed, because text entered into the Value field is interpreted literally.

This table displays examples of setting the variable &MyVar in the value field and the expected result:

<b>Recognition</b>	<b>Value</b>	<b>Expected Result</b>
&MyVar	&PriorVar	Contents of &PriorVar variable
&MyVar	CONCAT("&PriorVar")	&PriorVar
&MyVar	Hello	Hello
&MyVar	"Hello"	"Hello"
&MyVar	""""Hello"""	""""Hello"""

## Related Links

[Parameters](#)

[Variable](#)

[Conditional](#)

---

## Using Text Strings as Parameters in Functions

The following rules apply when text strings are used as parameters in functions:

- Text strings supplied as parameters for a function must always be wrapped in quotes, regardless of whether they appear in the Recognition field or the Value field.
- The CONCAT() function should be used to return a text string containing special characters such as ampersands that could be interpreted as a variable reference.
- Double quotes (""") should be used to return one quotes character. Consequently, when a final text string result is expected to include leading and trailing quotes characters, the parameter supplied should be lead and trailed by three quotes characters, for example, """"Hello"""".
- To include a line break within a text string, use <NL>. For example:

```
prompt=Newline Message Prompt!!<NL>Line1<NL>Line2<NL>Line3
```

Creates the following text string:

```
Newline Message Prompt!! Line1 Line2 Line3
```

```
Newline Message Prompt!!
Line1
Line2
Line3
```

---

**Note:** PTF will return an error (unrecognized / illegal variable format) if the user fails to wrap a text string being supplied as a parameter for a function in quotes.

---

This table shows examples of the text string used in the recognition field assuming the variable `&MyVar` is set to "Hello" (`&MyVar="Hello"`) and the expected results:

<b>Recognition</b>	<b>Expected Result</b>
<code>CONCAT("&amp;MyVar = "   &amp;MyVar)</code>	<code>&amp;MyVar = Hello</code>
<code>SUBSTR("Hello"   1   5 )</code>	Hello
<code>SUBSTR("""Hello """"   1   7 )</code>	"Hello"
<code>INSTR("Hello"   "e" )</code>	2
<code>INSTR("""Hello""""   "e" )</code>	3
<code>INSTR("""Hello""""   ""e"" )</code>	0
<code>INSTR(Hello   e )</code>	PTF returns error message

## Using Persistent Variables

If you need to store variables between tests, use persistent variables. PTF stores persistent variables to the database so that subsequent test executions can use them.

Persistent variables are stored in the database keyed by execution option name. Persistent variables can also be keyed by User ID, machine name, or both.

There are two key elements required to use persistent variables:

1. Set the variable action in the test.
2. Set persistent variable options.

## Setting Variable Option in the Test

To set the variable option in the test, use the Test Property icon.

1. Create a new test or open an existing test.
2. Click on the Test Properties icon.



The test properties icon is located in the Test information group box.

3. Set the Variable Action field.
  - None (default). The test will not be using persistent variables. All variables set in the test are only global to the current test execution.

- Read. The test can only read persistent variables from existing persistent variables in the PTF test database.
- Write.

The test can only write persistent variables to the PTF test database.

- Read & Write. The test can read and write persistent variables from and to the PTF test database.

## Setting Persistent Variable Options

The persistent variable options are available on the Advanced Options page in Execution Options. You can set the Advanced Options in the PTF client or PIA.

See [Configuring Execution Options in PTF Client](#) or [Defining Advanced Options](#)

## Managing Persistent Variables



Use the Manage Persistent Variables page (PSPTTSTPERVAR) to modify or delete persistent variables.

### Navigation

PeopleTools, Lifecycle Tools, Test Framework, Manage Persistent Variables

### Image: Manage Persistent Variables page

This example illustrates the fields and controls on the Manage Persistent Variables page. You can find definitions for the fields and controls later on this page.

Manage Persistent Variables				
		Personalize   Find   View All     First 1-2 of 2 Last		
	Name	User ID	Machine Name	Value
<input type="checkbox"/>	T1B85301	PTFTRN		&ROLE ADS Designer
<input type="checkbox"/>	T1B85301	PTFTRN		&USERID PTINT

This page will list all the persistent variables stored in the database. The variable is stored when the test writes the variable to the database.

The variable is always stored with the name of the execution option. The User ID and Machine Name are dependent on the selection you made for the persistent variable on the Advanced Options page of the Execution Options.

You can delete persistent variables or modify the variable value.

## Example of a Test that uses Persistent Variables

This example shows a test where the variable action was set to Read & Write in the Test Properties. The variable &userid exists in the persistent variable table.

### Image: Example of using persistent variables in a test

This example illustrates reading a persistent variable (&userid) and writing a persistent variable (&role).

Browser	Start_Login			
Page	Prompt	MAINTAIN_SECURITY.USERMAINT.GBL		update
Log	Message	Step below will read persistent variable from persistent variable table		
Text	Set_Value	Name=PSQPRDEFN_SRCH_OPRID		&userid
Page	PromptOk			
Page	Go_To	Roles		
Log	Message	Step below will write persistent variable to persistent variable table		
Text	Get_Property	Name=PSROLEUSER_VW_ROLENAME\$0	ret=&role;prop=Value	

## Using Conditional Logic

This section discusses how to use conditional logic.

Some test scenarios call for conditional logic—special handling based on information gathered from the application during the test. Conditional logic uses a Conditional.If\_Then step with a Conditional.End\_If step. The If\_Then step evaluates a statement. If the expression evaluates to True, the system executes the lines between the If\_Then step and the End\_If step or the Else step, if it exists. If the expression evaluates to False, the system jumps to the Else step, if it exists, or to the End\_If step if there is no Else, and continues execution.

What appears to be simple test instruction, such as the following, may require conditional logic to automate successfully:

12. In the Modify a Person page, click the Brazil flag if necessary to expand the Brazil region of the page.

When you record the click on the Brazil flag, PTF creates the following step, which looks deceptively simple:

### Image: Example of Step that Requires a Conditional Construct

This example illustrates an image field that requires conditional logic. The conditional logic is described later on this page.

Image	Click	Name=DERIVED_IC_GBL_BRA\$img		
-------	-------	------------------------------	--	--

The problem is that pages like the Modify a Person page typically use the same image to collapse and expand a section. The page may remember which regions are expanded and which are collapsed, so that the next time you run the test, the Brazil section might be expanded when you enter the page, in which case the Image.Click action in the previous example would collapse the Brazil section and potentially cause the test to fail.

The solution is to click the flag image only if the section is collapsed, which requires putting the click action within a conditional If-Then construct.

For example, suppose that you use the Message tool to determine that when the region is already collapsed, the alt property of the flag image is equal to “Expand section Brazil.” Alternatively, when the region is already expanded, the alt property of the same image is equal to “Collapse section Brazil.” You would construct your test such that the click would only occur if the alt property is equal to “Expand section Brazil.” You could do that with the following steps:

### Image: Example of Using Conditional Logic

This example illustrates the steps necessary for the conditional logic.

Image	Click	Name=DERIVED_IC_GBL_BRA\$mg	prop=alt.ret=&flagstate	
Conditional	If_Then	&flagstate=Expand section Brazil		
Image	Click	Name=DERIVED_IC_GBL_BRA\$mg		
Conditional	End_If			

**Note:** The same rules apply for text strings used in the recognition field as described in the Using Text Strings as Parameters in Functions section.  
See [Using Text Strings as Parameters in Functions](#)

### Related Links

[Conditional](#)

## Handling Application Messages

This section discusses how to handle application messages.

Use the Message Recognition feature to specify how PTF will respond to messages, such as warning messages or error messages, issued by the application being tested.

For example, suppose you have the following manual test instructions:

```
12. Clear the Calculate all Plans checkbox. If you get the following
    warning, click OK:
    Warning - Remember all plans must be selected to ensure an accurate 415
    limit calculation (48,17)
```

When you record the test, the step that triggers the message and the step that clicks OK might look like this:

### Image: Example of steps that trigger and dismiss a warning

This example illustrates a step that triggers the message and the step to dismiss a warning.

CheckBox	Set_Value	Name=PA_CALCULATION_CALC_ALL_PLANS_cd\$0	N
Button	Click	Name=#COK	

However, some test cases belonging to this test might not deselect the Calculate all Plans check box in the first step. In these cases, the first step would not trigger the warning message and PTF would fail to find the OK button in the second step.

You could use conditional logic to evaluate whether the test case deselects the check box. Alternatively, you could use the Error Handling feature to indicate that PTF should click OK whenever that specific message appears in the application.

To create a message definition, access the Message Recognition dialog box.

1. With a test open, click the Message Recognition icon.
2. Enter the text of the message, or a portion of the text, in the Message field.

The following example uses the message catalog number rather than the full message text.

You can define message definitions at either the test or test case level. Message definitions defined at the test case level take precedence over message definitions defined at the test level.

3. Select which button the step should click.
4. Specify what action PTF should take after the button is clicked.
5. To delete a message, select the message line and press the Delete key.

This example shows the Message Recognition dialog box. In this example when the application message (1040,3) error occurs, PTF will click the *Cancel* button and abort the test execution.

---

**Note:** The Test Case Message Definitions takes precedence over the Test Message Definition.

---

### Image: Message Recognition dialog box

This example illustrates the fields and controls on the Message Recognition dialog box. You can find definitions for the fields and controls later on this page.

**Message Recognition**

☒ Use Message Recognition

Test Message Definitions

	Message	Button	Action
▶	(1040,3)	OK	Continue
*		OK	Continue

Test Case Message Definitions

	Message	Button	Action
▶	(1040,3)	Cancel	Abort
*		OK	Continue

OK Cancel

This table lists the names and definitions of the elements on the Message Recognition dialog box:



**Message**

Enter the message, or portion of the message, displayed by the error. For example, you might use the Message Catalog numbers.

**Button**

Enter the button that PTF should click when it encounters the message.

Valid values are:

- *OK*
- *Abort*
- *Retry*
- *Ignore*
- *Yes*
- *No*
- *Cancel*

**Action**

Select the action that PTF will take.

Valid actions are:

- *Continue*: Log an Info message and continue processing.
- *Abort*: Log a Fail message and stop test execution.

---

## Interpreting Logs

This section discusses how to interpret logs.

This table lists and describes common log messages:

<b>Status</b>	<b>Message</b>	<b>Description</b>
Fail	Access is denied. Please check browser settings.	<p>PTF is not able to read information from your browser.</p> <p>Check browser settings to make sure your browser is configured properly.</p> <p>See <a href="#">Configuring the Browser Settings</a>.</p>

<b>Status</b>	<b>Message</b>	<b>Description</b>
Fail	Object not found in the page, or access is denied to the Frame.	<p>If all of your steps that involve setting values, verifying values, or getting properties return a failure with this message in the log, then it is likely PTF is having trouble interacting with your browser in general.</p> <p>Check browser settings to make sure your browser is configured properly.</p> <p>See <a href="#">Configuring the Browser Settings</a>.</p> <p>If this log message appears sporadically throughout your log, it could mean that objects within your application have been removed or renamed.</p> <ul style="list-style-type: none"> <li>• Check the application or the screen shots in the log associated with the failed step to see if the object still appears on the page.</li> <li>• If the object appears where expected on the page, use the Message tool to compare the names and IDs of the objects on the page with those in the Recognition field of the step.</li> </ul> <p>See <a href="#">Using the Message Tool</a>.</p> <ul style="list-style-type: none"> <li>• If object names or IDs have changed since you recorded your tests, consult with your PTF administrator about the possible need to run maintenance on your tests.</li> </ul> <p>See <a href="#">Interpreting Test Maintenance Reports</a></p>

## Incorporating Scroll Handling

This section discusses how to incorporate scroll handling in PTF tests.

Data on a PeopleSoft component is organized hierarchically using rowsets, or scrolls, and rows.

A scroll can be implemented as a scroll area or a grid. In scroll areas, the fields appear on the page in a freeform manner. In grids, fields appear as columns similar to those on a spreadsheet. Individual rows of data within a scroll or grid are uniquely identified by a set of one or more fields, or keys.

PTF references a field on a scroll by the field name and the row number. The PTF scroll handling feature enables a test to identify a row number at test execution time based on the keys for that row.

For example, suppose you have a test requirement that says:

12. Verify that the QEDMO user profile has the PTF Administrator role.

Here is an example of the Roles page for the QEDMO user profile:

### Image: Example of the User Profile - Roles page

This example illustrates the fields and controls on the Example of the User Profile - Roles page.

User ID: QEDMO  
Description: QE User

Dynamic Role Rule		User Roles				
Execute on Server:		Role Name	Description	Dynamic	Route Control	View Definition
<input type="text"/>		PTF Administrator	PTF Administrator	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
<input type="button" value="Test Rule(s)"/> <input type="button" value="Refresh"/>		PeopleSoft User	PeopleSoft User	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
<input type="button" value="Execute Rule(s)"/>		Portal Administrator	Portal Administrator	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
<a href="#">Process Monitor</a>		Portal Manager	Portal Manager	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
<a href="#">Service Monitor</a>		QE Role	QE Role	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
		XMLP_ADMIN	XMLP Administrator Role	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
		XMLP_ANALYZER_EXC	XMLP Excel Analyzer Role	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
		XMLP_ANALYZER_ONI	XMLP Online Analyzer Role	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
		XMLP_DEVELOPER	XMLP Developer Role	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>
		XMLP_SCHEDULER	XMLP Scheduler Role	<input type="checkbox"/>	<a href="#">Route Control</a>	<a href="#">View Definition</a>

When you record the test, PTF generates a step similar to the following example:

### Image: Test step to verify a field on a scroll area

This example illustrates the test step to verify a field on a scroll area. You can find additional information on this step later on this page.

Scroll ID	Type	Action	Recognition	Value
	Text	Verify	Name=PSROLEUSER_VW_ROLENAME\$0	PTF Administrator

The step uses two elements in the Name= parameter in the Recognition column to reference the Role Name field: the name of the field (PSROLEUSER\_VW\_ROLENAME) and its row position index (\$0). A row position index is composed of a dollar sign (\$) and an integer. The integer count starts at zero, so indexes for a scroll containing 11 rows are \$0 through \$10.

This test will work as recorded until something changes the grid position of the row that contains PTF Administrator. For instance, if another row is inserted before PTF Administrator, the PTF Administrator row position index changes to \$1, and the test fails. The same problem occurs if the grid is sorted differently, or if a test case tests a different user profile, such as QEMGR.

## Using a Dynamic Position Index

You can use the Scroll.Key\_Set action and a Scroll.Action step to locate a row by key and generate a dynamic position index variable. Then you can use the dynamic position index variable to reference a row or a field reliably and repeatedly because the variable is regenerated each time the test is run.

For example, instead of looking at the first row, PTF looks for the row where the key equals “PTF Administrator”.

If the value exists in the scroll, the test finds it, takes the specified action, and returns the position index.

If it does not find the value in the first displayed set of rows, PTF clicks the Show Next Rows icon on the scroll and continues searching until it has found the key value or searched all rows on all pages of the scroll.

Follow these steps to use a dynamic position index variable:

1. Create Key\_Set steps.
2. Create an Action step.
3. Use the index variable for other steps.
4. Specify the Scroll ID.

## Creating Key\_Set Steps

Create one Key\_Set step for each field in the scroll key. If the key consists of three fields, create three Key\_Set steps and specify key values for each of the three fields.

---

**Note:** You can create Key\_Set steps and Action steps during recording.

---

See [Using the PTF Test Recorder](#).

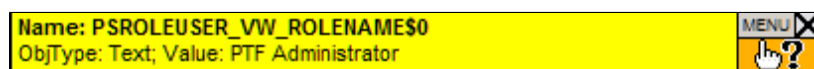
You can insert Scroll steps during recording or you can add them afterward. The following process explains how to insert and modify key steps manually. Even if you record Scroll steps, you may need to modify them using some of these concepts.

Key\_Set requires two parameters in the Recognition column; Type= and Name= . You can get these values by recording a step with the PTF recorder and then manually modifying the recorded step or by copying the information from the application using the Message tool and pasting into a step.

Specify the field value in the Value column. You can use the PTF Recorder or Message tool to get the field value as well.

### Image: Example of the Message tool

This example illustrates the Message tool with recognition data for the Role Name field.



Here is an example of a test step that references a row on a scroll. This step checks for the existence of *PTF Administrator* in the Role Name field:

### Image: Example of a step that verifies a field on a row

This example illustrates a test step that references a row on a scroll.

Scroll ID	Type	Action	Recognition	Value
	Text	Verify	Name=PSROLEUSER_VW_ROLENAME\$0	PTF Administrator

This is one way to convert the step in the example to a Scroll.Key\_Set step:

1. Change the Type to *Scroll*.
2. Change the Action to *Key\_Set*.

3. Add *Type=Text*; to the Parameter column.
4. Leave the Name parameter in the Recognition column, but remove the row position index (\$0).

This signals PTF that the actual row number for the key is not yet known.

### Image: Example of a Scroll.Key\_Set step

This example illustrates a Scroll.Key\_Set step that sets the key to PTF Administrator.

Scroll ID	Type	Action	Recognition	Parameters	Value
1	Scroll	Key_Set	Name=PSROLEUSER_VW_ROLENAME	type=Text	PTF Administrator

This step defines the key value, but PTF does not take an explicit action on the page based on the key until it executes an Action step.

## Creating an Action Step

Create an Action step, based on what action you want to take on the row, such as update, insert, select, and so on. All of the available actions are detailed in the PTF Language Reference.

In this example, you want to select a row, so enter *sel* in the Value field.

The Action step attempts to locate a row defined by Key\_Set. If a row is found, it returns the index of the row. Use the *ret=* parameter of the Action step to populate an index variable with the row index value.

### Image: Example of an Action step

This example illustrates an action step.

Scroll ID	Type	Action	Recognition	Parameters	Value
1	Scroll	Action		ret=&Scroll1	sel

## Using the Index Variable

Now that you have the row position stored in the index variable, you can use that value to reference other fields on that row.

For instance, suppose you want to verify the Dynamic checkbox. You can use the PTF Recorder or the Message tool to get its name and position and create a step similar this one:

### Image: Example of step using positional reference

This example illustrates a step with a positional reference.

CheckBox	Verify	Name=PSROLEUSER_VW_DYNAMIC_SW\$0		N
----------	--------	----------------------------------	--	---

This step has the problem that the positional reference is static, so it won't work if the position changes. To fix that, replace the position index with the index variable.

This example shows a step that uses an index variable following the steps that locate the key and set the index variable:

### Image: Example of a step using an index variable

This example illustrates a step using an index variable.

Scroll ID	Type	Action	Recognition	Parameters	Value
1	Scroll	Key_Set	Name=PSROLEUSER_VW_ROLENAME	type=Text	PTF Administrator
1	Scroll	Action		ret=&Scroll1	set
	CheckBox	Verify	Name=PSROLEUSER_VW_DYNAMIC_SW&Scroll1		N

Now whenever the test is run, the index variable is updated dynamically by the Key\_Set and Action steps and the positional reference is accurate.

## Specifying the Scroll ID

Assign a Scroll ID to group Scroll actions for each scroll. Use a different scroll ID and scroll variable for each different scroll area. You can assign any integer you like, as long as it is unique.

Scroll ID is a required field for Scroll actions.

If you are taking multiple actions in the same scroll, using the same scroll ID and scroll variable improves performance over using a new scroll ID.

In this example, the test defines two Action steps that both act on the same scroll. The first action verifies that the user profile does not contain the PTF Administrator role. The second action verifies that the user profile does contain the PTF User role. You would assign the same Scroll ID number to all four of the Scroll steps because they all act on the same scroll.

### Image: Example of assigning Scroll IDs to Scroll steps

This example illustrates assigning scroll IDs to scroll steps.

Scroll ID	Type	Action	Recognition	Parameters	Value
	Page	Go_To	Roles		
1	Scroll	Key_Set	Name=PSROLEUSER_VW_ROLENAME	type=Text	PTF Administrator
1	Scroll	Action		ret=&Scroll1	not
	Log	Message		Scroll1 index variable = &Scroll1	
1	Scroll	Key_Set	Name=PSROLEUSER_VW_ROLENAME	type=Text	PTF User
1	Scroll	Action		ret=&Scroll1	set

## Related Links

[Scroll](#)

# Calling Tests

This section provides an overview of calling tests and discusses how to:

- Use library tests.
- Use shell tests.
- Use parameters with library tests.
- Share test assets.

## Understanding Calling Tests

If a test uses a sequence of steps repeatedly, you may want to isolate the repetitive sequence of steps and move them to another, smaller test. Doing so enables you to call the steps repeatedly and also make them available to other tests that use the same sequence of steps.

Moving shared test steps to a distinct test (a called, or child, test) provides these benefits:

- Reduces the amount of recording or development you need to do.
- Reduces the amount of debugging you need to do.
- Reduces the effects of development changes that require manual updates to existing tests.

You can use the Test.Exec action to call any other test, but you may be able to manage and identify the relationships between calling and called tests more easily on the PTF Explorer tree if you use library tests and shell tests.

## Using Library Tests

A library test cannot be executed by itself. It must be called by another test.

To make a test a library test, select the Library Test check box in the Test Editor.

Complete these steps to create a library test from an existing test:

1. Open an existing test.
2. Identify repetitive steps within the test, copy them from the existing test, and paste them into a new test.
3. Select the Library Test check box on the new test.
4. Save the library test.
5. Remove the repetitive steps from the original test and replace them with a step that uses a Test.Exec action to call the new test.
6. Save the original test.

## Using Parameters with Library Tests

Parameters enable you to pass dynamic values from a calling test to a library test.

To use parameters:

1. Define the parameters in the library test.
2. Assign values to the parameters in the calling test.
3. Use the parameters as you would text strings in the library test.

To define parameters in a library test:

1. Select the Library Test check box in the Test Properties dialog box.

2. Enter the names of parameters in the Parameter List.

Parameter names can be up to 254 characters, and can contain only letters, numbers, and underscores.

3. Click OK to dismiss the dialog box.

The following example shows a parameter list:

**Image: Test Properties dialog box with a parameter list**

This example illustrates the fields and controls on the Test Properties dialog box with a parameter list.

**Test Properties**

Test Properties

Last Updated : 7/1/2011 5:46:33 PM      Updated By :

Language (\*) : English

(\*) Language: Changing the value only affects the language the test selects at sign in. It will not enable the test to execute against a different language. PTF tests should be executed against the same language in which they were recorded.

☒ Library Test

Parameter list

1	UserName
2	Password
3	OrderNbr
▶*	

OK      Cancel

In the calling test, place parameter assignments in Test.Exec steps in the Parameters field, separated by semicolons, with no spaces. You can place multiple parameter assignments, separated by semicolons. The last semicolon is optional.

---

**Note:** The semicolons must not be followed by spaces.

---

The following example shows a Test.Exec step that calls a library test and passes three parameters.

**Image: Test.Exec step with parameters**

This example illustrates a Test.Exec step with parameters.

Type	Action	Recognition	Parameters	Value
Test	Exec	PB_PARMS_LIB	UserName=QEDMO>Password=QEDMO.OrderNbr=1001	DEFAULT



In the library test, place a `%param.parameter_name%` construct wherever you want to use a parameter. The parameter is replaced at runtime by the text assigned in the calling test.

### Image: Library test steps with parameters

This example illustrates library test steps with parameters.

Type	Action	Recognition	Parameters	Value
Text	Set_Value	Name=userid		%param.UserName%
Pwd	Set_Value	Name=password		%param.Password%
Variable	Set_Value	%OrderNbr=%param.OrderNbr%		

**Note:** All library parameters values need to be set in the calling test, variables are not automatically initialized. If the user makes a call to the library without passing a value for the parameter, the parameter value will be the parameter name. For example, if the parameter is `UserName` and the value is not set, the value be `%param.UserName%` not blank.

## Using Shell Tests

To create a shell test, while in PTF Explorer select Create, Shell Test.

A shell test is a type of test that is meant to be used primarily to call other tests. For this reason, a shell test only supports these actions:

- Execution actions - modify the behavior of tests during execution. Execution actions include `Skip_PageSave`, `Skip_RunRequest`, `Skip_Login`, `StopOnError`, and `Set_Options`.
- `Test.Exec` - calling other tests. `Test.Exec` enables you to call multiple test cases with a test and, using the `#Ignore` reserved word, skip the test call for certain test cases.
- `DataMover.Exec` - calling data mover scripts.
- `Query.Exec` - running queries.
- `Log.Message` and `Log.Screenshot`.
- `Variable.Set_Value` - manipulating variables.

Organizing component tests into shells enables you to identify large business-process oriented type tests (that is, the type that cross multiple components and online activities). The steps available in shell tests are intentionally limited in order to represent high-level business process flows through called test routines.

PTF variables are global, so you can set a variable in the shell test and use it in the called tests, or you can set a variable in a test and use it in the shell test or other called tests.

## Sharing Test Assets

Often, test developers, application developers, testers, and others collaborate to develop tests. PTF enables you to send links to tests, test cases, and logs to other users, saving them from having to navigate through PTF Explorer to locate them.

To share the location of a test asset:

1. Copy the link to the clipboard.

- In PTF Explorer, highlight the name of a test asset and select Edit, Copy Link to Clipboard.
  - In the Log Viewer, with a log open, select Log, Copy Link to Clipboard.
2. Paste the link text into a message or document to send to another user.
  3. The recipient copies the text and selects Window, Quick Open.

The Quick Open feature is available in PTF Explorer, Test Editor, and Log Viewer.

The system automatically copies the link for the asset to the Quick Open dialog box.

4. The recipient clicks OK to open the asset.

You can also use Copy Link to Clipboard with the Quick Open feature to locate a folder in PTF Explorer.

# Administering PTF

---

## Managing PTF Logs

This section provides an overview of PTF Log Manager and discusses how to:

- Use Log Manager toolbar.
- Use Log Manager fields.
- Use the Selection pane.
- Use the Trace pane.

## Understanding Log Manager

Over time, as you run tests, you will create a number of test logs. Because they reside in your application database, test logs, especially those containing many screen shots, can affect the storage demands on your database. PTF Log Manager enables you to minimize this demand and remove clutter from PTF Explorer.

To help you decide which logs to remove from your database, Log Manager lists log entries from the test environment based on the criteria you specify. If all the fields are empty, then Log Manager lists all the logs in an environment that were created within the specified date range. The default date range is the current date.

To access the Log Manager, select Tools, Log Manager.

---

**Note:** Only an administrator (a user ID with the PTF Administrator role) is able to open Log Manager.

---

### Image: Example of PTF Log Manager

This example illustrates the fields and controls on the PTF Log Manager page. You can find definitions for the fields and controls later on this page.

PeopleSoft Test Framework - Log Manager

Retrieve Delete Undelete Purge Close

Folder / Test

Folder Path: \$\PTF Course

Test: TRN\_03\_INSTRUCTOR

Criteria

Log Folder: [Dropdown] No. Logs to Keep by Folder: [Dropdown]

☐ By Date Range From: 4/11/2012 To: 5/11/2012

☐ By Log Status ☐ Fatal Error ☐ Fail ☐ Warning ☐ Pass ☐ None

Extra Options

☐ Bypass Selection ☐ Use Start Time 10:00

Selection Trace

Unselect All Clear Refresh Selected: 5 Processed: 0 Error: 0

Test Path	Log Folder	Log ID	Log Status	Log Name	Last Update	User
<input checked="" type="checkbox"/> \$\PTF Course\TRN_03_INSTRUCTOR	CATHY	5	Pass	5. PTFTRN 2012-05-11 11:21	5/11/2012 12:21:47 PM	PTFTRN
<input checked="" type="checkbox"/> \$\PTF Course\TRN_03_INSTRUCTOR	CATHY	4	Fail	4. PTFTRN 2012-05-11 11:17	5/11/2012 12:18:48 PM	PTFTRN
<input checked="" type="checkbox"/> \$\PTF Course\TRN_03_INSTRUCTOR	CATHY	3	Pass	3. PTFTRN 2012-05-09 18:25	5/9/2012 5:26:27 PM	PTFTRN
<input checked="" type="checkbox"/> \$\PTF Course\TRN_03_INSTRUCTOR	CATHY	2	Fail	2. PTFTRN 2012-05-09 18:24	5/9/2012 5:24:56 PM	PTFTRN
<input checked="" type="checkbox"/> \$\PTF Course\TRN_03_INSTRUCTOR	CATHY	1	Fail	1. PTFTRN 2012-05-09 18:18	5/9/2012 5:23:39 PM	PTFTRN

Completed getting database list

## Using Log Manager Toolbar

The log manager toolbar has the following options:

### Retrieve

Select to populate the selection pane based on the specified criteria.

---

**Note:** The user can cancel the retrieval process at any time by pressing the Abort button, and thus getting a partial result.

---

### Delete

Select to delete the selected logs.

### Undelete

Select to cancel logs marked for deletion. When you click Delete, the selected logs are only marked for deletion. They are not removed from the database until you click Purge Log. Until then, you can undelete logs.

### Purge

Select to remove selected logs from the database if they are marked for deletion.

### Close

Select to close log manager.

## Using Log Manager Fields

Log Manager has these fields:

### Folder / Test

#### Folder Path

Browse to a folder in PTF Explorer. If a folder is specified, the system retrieves only the logs in that folder, including subfolders. If no folder is specified, the system retrieves all logs in the environment.

#### Test

The system retrieves the logs associated with the selected test. The drop-down list is restricted to the tests in the folder specified in Folder Path.

### Criteria

#### Log Folder

Select a log folder. Log folders associated with the selected test are available in the list.

#### No. Logs to Keep by Folder (number of logs to keep by folder)

Select the number of logs to include in the folder. For instance, if the folder contains six logs and you specify three, then the three newest logs will be retained (that is, they will not be included in the list as candidates for deletion) and the three oldest logs will be retrieved. Select zero to retrieve all logs.

#### Date Range

The system retrieves only logs created within the date range.

#### By Log Status

When you select this check box, the statuses are available. Select the status(es) to list and click the Refresh button in the Selection pane. The results are updated in the Selection pane.

### Extra Options

#### Bypass Selection

Select to perform the selected action on all log entries listed according to the criteria, regardless of user selections.

#### Use Start Time

Select and enter a value to start the process at the designated time.

## Using the Selection Pane

The selection pane displays the logs based on the selection criteria. By default all the logs are selected.

When you click Retrieve, the system populates this pane with logs based on the criteria you specified. Using the check boxes, select the logs that will be processed when you click Delete, Undelete, or Purge.

The selection pane contains a status bar that displays the number of logs selected, processed and errors, as well as buttons for:

#### Unselect All

Click to unselect all logs.

**Clear**

Click to clear the selection list.

**Refresh**

Click to refresh the selection after changing the criteria.

---

**Note:** The Refresh is based on the new criteria only. If you change the folder path or test, you must use do a new Retrieve.

---

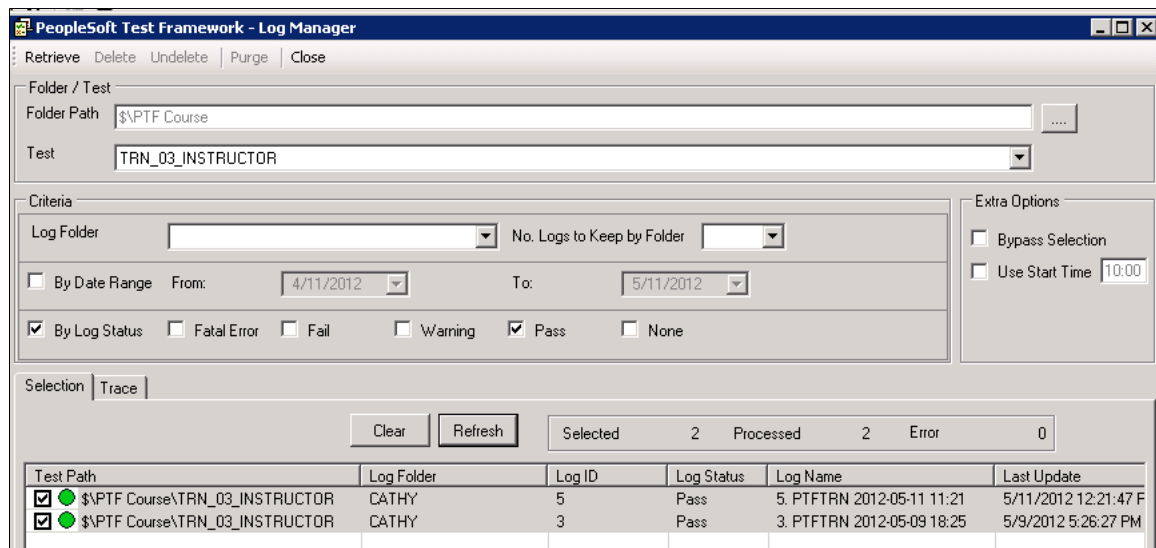
All of the columns in the selection section are resizable.

**Example Purge**

When you select logs in the selection pane and then select Purge from the toolbar, the selection pane status is updated and the focus is set on the log lines being processed.

**Image: Example of PTF Log Manager after Purge**

This example illustrates PTF Log Manager after Purge.

**Using the Trace Pane**

The trace pane displays a history of processing actions for this session.

**Working with Application Designer Projects in PTF Client**

The PTF client enables you to inspect and maintain the test contents of an Application Designer project, and complete the following tasks:

- Create new Application Designer projects.
- Open existing Application Designer projects.
- Insert tests into Application Designer projects.
- Remove tests from Application Designer projects.

- Set the upgrade action type for the tests within Application Designer projects.

Access to this feature is limited to PTF Administrators. In addition, the appropriate PeopleTools security roles and permissions necessary to administer Application Designer projects are required. Only test-related data within a project is modified; any other content that exists within the project is not affected.

---

**Note:** This section assumes you are already familiar with Application Designer projects. For detailed information about Application Designer Projects, see *Application Designer Developer's Guide*.

---

## Managing Application Designer Projects in PTF Client

Use the Projects dialog box to manage Application Designer projects within the PTF client.

To access the Projects dialog box, select the *@<PTF Environment Name>*, Projects menu command.

### Image: Projects Dialog Box

This example illustrates the fields and controls in the Projects dialog box.

Test	Folder	Upd By	Updated	Version	Action	Status
PTD_PIA_COMMON_ACCESSIBILITY	\PeopleTools Development\Core Tools\PIA Core Technology (TECH)	PPLSOFT	5/6/2014 6:43:12 PM	56	copy	new
PTD_PIA_COMMON_LOGIN	\PeopleTools Development\Core Tools\PIA Core Technology (TECH)	PPLSOFT	5/6/2014 6:43:12 PM	56	copy	new
PTD_PORTAL_TOGGLE_SIGNIN_LANG	\PeopleTools Development\Core Tools\Portal (PORTAL)	PPLSOFT	5/6/2014 6:43:16 PM	56	delete	removed
QEMPA_POPUP_GETTEXT	\PTQA\FL\AJAX_Gen	VP1	9/24/2013 3:56:32 PM	26	copy	
QEMSF_PRCS_WAIT_FOR_DST_STATUS	\PTQA\FL\PROCESS_SCHEDULER	VP1	9/24/2013 3:56:35 PM	26	delete	changed

Use these fields and controls to open or create a project:

#### Project

Select a project.

#### Open

Click to open the selected project. This option is not available if the Project field is blank, or a project with pending changes is open.

#### New

Click to create a new project. At the prompt, enter a unique project name.

This option is not available if a project with pending changes is open.

---

**Note:** •New projects are not saved until a test object is inserted and you click the Apply button.

---

The grid area serves as a worksheet that lists the following information about the project's tests.

<b>Test</b>	The test name.
<b>Folder</b>	The name of the folder the test belongs to.
<b>Upd By</b>	The user ID of the person that last updated the test.
<b>Updated</b>	The date and time the test was last modified.
<b>Version</b>	The test version.
<b>Action</b>	<p>The upgrade action associated with this project test record, either <i>Copy</i> or <i>Delete</i>.</p> <p>By default, the action is set to <i>Copy</i> when the test is initially inserted into the project.</p> <p>To change the upgrade action, click the Action - Copy or Action - Delete button.</p>
<b>Status</b>	<p>The status of the project test record. This updates automatically while you interact with the project using this dialog box to show the changes made during the current session. Once you apply the changes, the status resets.</p> <p>Values are:</p> <ul style="list-style-type: none"> <li>• <i>New</i> Indicates the test record was inserted during this session.</li> <li>• <i>Changed</i> Indicates the upgrade action was changed during this session.</li> <li>• <i>Removed</i> Indicates the test record was set to Removed during this session.</li> <li>• No entry (blank). Indicates no changes were made during this session.</li> </ul>

Initially, when you open the Projects dialog box, the grid is empty. It populates when you:

- Open a project that contains tests.
- Add tests by using the Insert button.

Use these buttons to interact with the project worksheet.

<b>Select All</b>	Click to select all of the tests in the grid.
<b>Deselect All</b>	Click to deselect all of the tests in the grid.



<b>Action - Copy</b>	Click to set the upgrade action type to copy.
<b>Action - Delete</b>	Click to set the upgrade action type to delete.
<b>Remove</b>	Click to remove selected tests from the project.
<b>Insert Tests</b>	Click to insert tests into the current project.  A window appears that enables you to select the tests from to insert. Currently active filters are applied to the view. You can select multiple tests or folders. If a parent folder is selected, tests from its associated child folders are included.
<b>Apply</b>	Click to commit all pending changes to the project. The Projects dialog box remains open.
<b>Close</b>	Click to close the dialog box. If there are any pending changes, you are prompted to save.

---

**Important!** Project content is not dynamic; it is a snapshot of the test data at the time it was inserted into the project. If you modify a test after you have included it in a project, you must re-insert that test into the project in order for the project to contain the revised test data.

---

## Creating a New Project

To create a new project:

1. Select the @<PTF Environment Name>, Projects menu command.

The Projects dialog box opens.

2. Click the New button.
3. At the prompt, enter a name for the new project, and click OK.

The Projects dialog box reappears. The Project field displays the new project name, and becomes unavailable. The Open and New buttons are disabled.

## Opening an Existing Project

To open an existing project:

1. Select the @<PTF Environment Name>, Projects menu command.

The Projects dialog box opens.

2. Select a project from the Projects list box.
3. Click the Open button.

If any tests are currently associated with the project, they appear in the grid.

## Inserting Tests into a Project

To insert tests into a project:

1. Select the @<PTF Environment Name>, Projects menu command.

The Projects dialog box opens.

2. Open an existing project, or create a new project.
3. Click the Insert button.

The PTF Explorer tree appears in the PTF Suite window.

4. Expand folders as needed to access and select the tests to insert (use Ctrl-Click to select multiple tests).
5. Click OK.
6. Click Apply to insert the tests into the project.

### Removing Tests from a Project

To remove tests from a project:

1. Open an existing project.
2. Select one or more tests in the grid.
3. Click Remove.
4. Click Apply.

### Setting the Upgrade Action Type for Test(s) in a Project

To set the upgrade action type for test(s) in a project:

1. Open an existing project.
2. Select one or more tests in the grid.
3. Click Action - Copy or Action - Delete to set the desired upgrade action type for the selected test(s).
4. Click Apply.

---

## Migrating PTF Tests

Because PTF tests and test cases are PeopleTools managed objects, they can be copied from one database to another in the same way as other PeopleTools objects, such as record definitions, SQL definitions, and PeopleCode programs.

You can create a project (in either the PTF client or in Application Designer) that includes tests and test cases, and export the project to another database using the Copy Project tool in Application Designer.

You can also include tests and test cases in an upgrade project.

### Related Links

"Inserting Definitions Into Projects" (PeopleTools 8.54: Application Designer Developer's Guide)

## Performing Mass Updates

This section provides an overview of the PTF Mass Update tool and discusses how to:

- Use the Mass Update page.
- Find and replace test step data.

## Understanding Mass Update

As the applications you are testing are updated, you will find various situations where many of your tests need to be modified. The Mass Update tool provides this capability, enabling you to perform mass updates to your tests.

For example, suppose in a new release, a component name has changed, and every test you have that references that component must now be modified in order to execute successfully. Using the Mass Update tool, you retrieve the impacted tests, search for steps that include that component and replace the previous component name with the new name.

### Mass Update Steps

To perform a mass update, complete these steps:

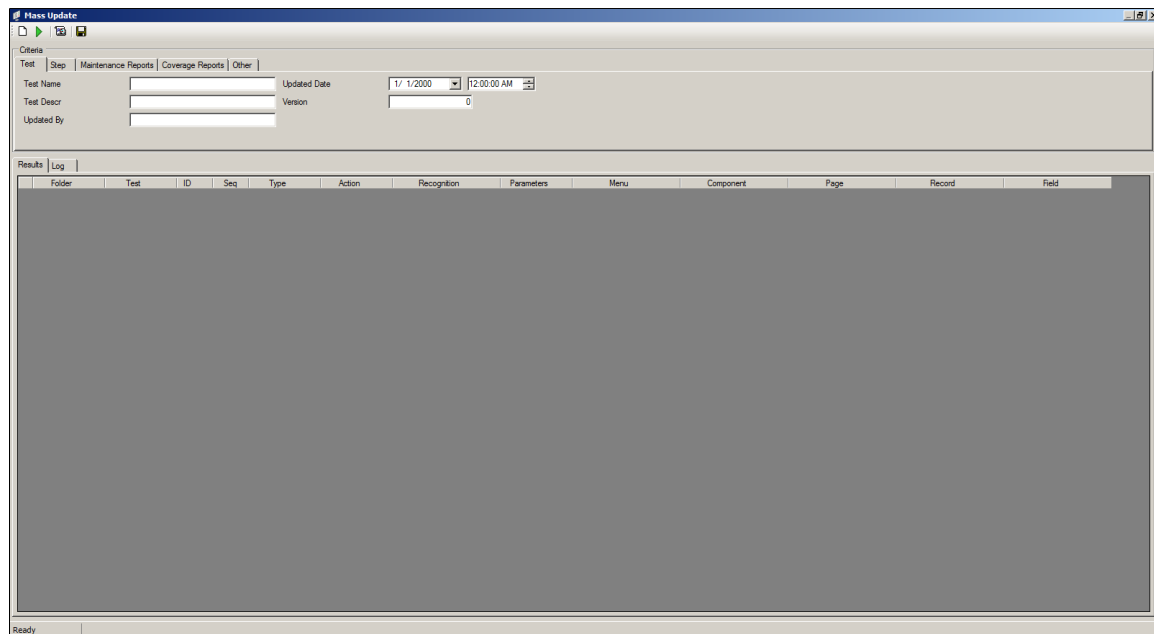
1. Open the Mass Update page.
2. Define the filter criteria.
3. Apply the filter to retrieve the test steps.
4. Find/replace the test step values that need to be modified.
5. Save.

## Using the Mass Update Page

To access the Mass Update page, select Tools, Mass Update.

### Image: Mass Update Page

This example illustrates the fields and controls on the Mass Update page.



When you first open the Mass Update page, the Results grid is empty; no test records appear in the grid.

When you use the mass update tool, you define and apply a filter to retrieve tests that match specific criteria, returning the results in a grid format similar to the Test editor, but including steps for *multiple* tests. The grid includes two additional columns: Folder and Test so you can identify which test the steps are from. Once the grid is populated, you can use a find/replace dialog box to search for specific test step field values, modify the steps, and save your changes.

### Mass Update Toolbar

The Mass Update Toolbar includes the following icons:



Click to clear all criteria fields.



Click to apply the filter and populate the grid with the matching test steps.



Click to open the Find and Replace dialog box.



Click to save all modified test steps.

### Mass Update – Criteria Group Box

Use the Criteria group box to define the filter criteria. When you open the Mass Update window, if filters for the PTF Explorer Tree have been defined, they are included automatically, but you can change the

filter criteria as needed; the same filter fields are used in Mass Update and the PTF Explorer Tree. For best performance, specify more criteria to reduce the number of test steps that are retrieved.

The criteria types are grouped by the following tabs: Test, Step, Maintenance Reports, Coverage Reports, Other. Click each tab to define the criteria fields for that group.

For details about the filter criteria fields, see [Defining and Applying Filters](#).

To include test cases, select the Other tab and check the Include Test Cases check box.

## Mass Update – Results Grid

Use the Results grid as a worksheet area for retrieving and modifying test steps. Initially, this grid is empty. To populate the grid, define the filter criteria, then click the Retrieve icon. A status of `Processing...` appears in the status bar during retrieval. Once processing is complete, the status bar states the number of records retrieved.

### Image: Mass Update Page – Results Grid

This example illustrates the Results grid after applying the filter.

Folder	Test	ID	Seq	Type	Action	Recognition	Parameters	Menu	Component	Page	Record	Field
PeopleTools De...	PTD_PIVOTGRI...	21	13	ComboBox	Set_Value	Name=PTPG_COL_VIEW_P...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_OPT	PTPG_COL_VIEW	PTPG_GRIDAXIS
PeopleTools De...	PTD_PIVOTGRI...	22	14	Button	Click	Name=PTFORM_NEXT_FB		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_OPT	PTPG_WORKREC	PTPG_NEXT_FB
PeopleTools De...	PTD_PIVOTGRI...	23	15	Page	Save			PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	24	16	Span	Click	ID=PT_CHART_SCROLL1...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	25	17	CheckBox	Set_Value	Name=PT_CHART_SCROLL...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	26	18	CheckBox	Set_Value	Name=PT_CHART_SCROLL...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	27	19	Button	Click	Name=PT_CHART_SCROLL...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	28	20	Span	Click	ID=PT_CHART_SCROLL1...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	29	21	CheckBox	Set_Value	Name=PT_CHART_SCROLL...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	30	22	CheckBox	Set_Value	Name=PT_CHART_SCROLL...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	31	23	Button	Click	Name=PT_CHART_SCROLL...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	32	24	Span	Click	ID=PT_CHART_SCROLL1...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	33	25	CheckBox	Set_Value	Name=PT_CHART_SCROLL...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	34	26	CheckBox	Set_Value	Name=PT_CHART_SCROLL...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	35	27	Button	Click	Name=PTFORM_NEXT_FB		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	36	28	Button	Click	Name=PTFORM_PREV_FB		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP	PTPG_WORKREC	PTPG_PREV_FB
PeopleTools De...	PTD_PIVOTGRI...	37	29	Radio	Set_Value	Name=PTPG_WORREC_P...		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_OPT	PTPG_WORKREC	PTPG_DISPLAYOPT
PeopleTools De...	PTD_PIVOTGRI...	38	30	Button	Click	Name=PTFORM_NEXT_FB		PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_OPT	PTPG_WORKREC	PTPG_NEXT_FB
PeopleTools De...	PTD_PIVOTGRI...	39	31	Page	Save			PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP		
PeopleTools De...	PTD_PIVOTGRI...	47	32	Browser	FrameSet							
PeopleTools De...	PTD_PIVOTGRI...	51	38	Text	Set_Value	Name=PTPG_WORREC1...		PTPG_WIZ_MENU	PS_PG_VIEWER	PTPG_PSPGVIEWER	PTPG_WORKREC1	PTPG_PGGRIDNAME
PeopleTools De...	PTD_PIVOTGRI...	52	39	Button	Click	Name=PTPG_WORREC1...		PTPG_WIZ_MENU	PS_PG_VIEWER	PTPG_PSPGVIEWER	PTPG_WORKREC1	PTPG_SRCH_BTN
PeopleTools De...	PTD_PIVOTGRI...	53	40	Link	Click	Name=PTPG_VIEW_BTN0		PTPG_WIZ_MENU	PS_PG_VIEWER	PTPG_PSPGVIEWER	PTPG_WORKREC1	PTPG_VIEW_BTN
PeopleTools De...	PTD_PIVOTGRI...	54	41	Browser	FrameSet	ptModFrame_#						
PeopleTools De...	PTD_PIVOTGRI...	55	43	CheckBox	Set_Value	Name=PTPGQOLVIRBTR...		PTPG_WIZ_MENU	PTPGVIEWER	PTPG_PGVIEWER	PTPGVWGRDREC	
PeopleTools De...	PTD_PIVOTGRI...	59	48	Link	Click	innerText=Priv Grid Adm...						
PeopleTools De...	PTD_PIVOTGRI...	60	49	Browser	FrameSet	TocsetContent						

The grid contains the same fields as the Test Editor, with two additional columns: Folder, and Test so you can identify which test the steps are from.

**Folder** Lists the folder hierarchy of the test the step belongs to.

**Test** Lists the name of the test that contains the step.

For information about the test step fields, see [Test Step Fields](#).

## Mass Update – Log Grid

The Log grid displays a log of mass update activity.

## Finding and Replacing Test Step Data

Click the Find icon on the Mass Update toolbar to open the Find and Replace dialog box. Two tabs are available:

### Find

Select the Find tab to find test step data.

### Replace

Select the Replace tab to find and replace test step data.

## Finding Test Step Data

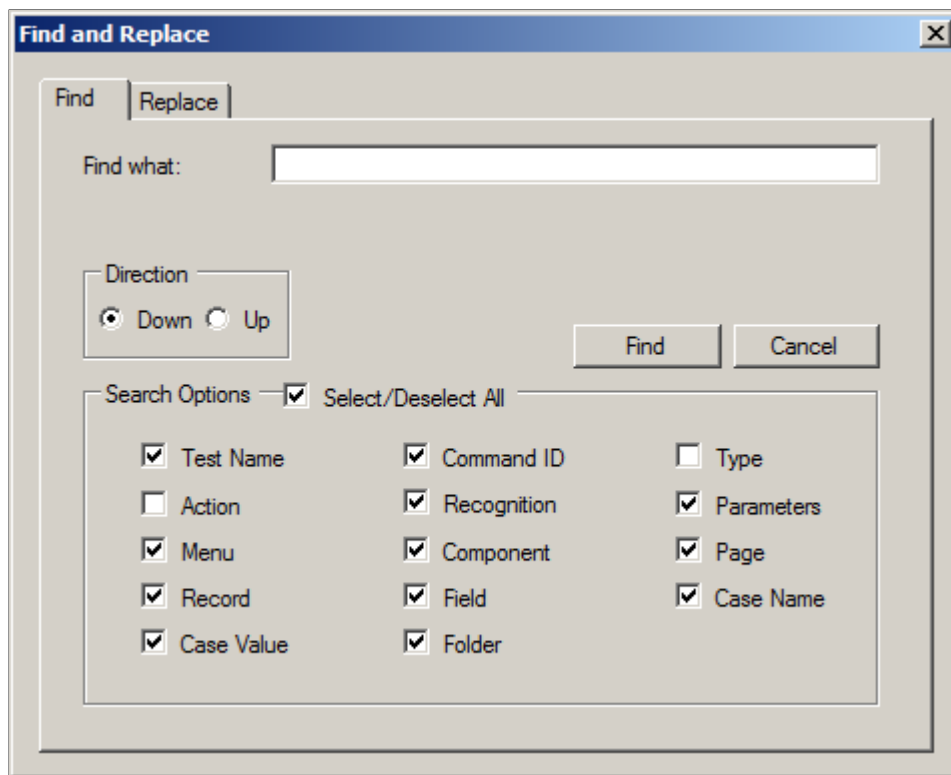
To find test step data:

1. Click the Find icon on the Mass Update toolbar.

The Find and Replace dialog box appears, with the Find tab active.

### Image: Mass Update - Find and Replace Dialog Box: Find Tab

This example illustrates the fields and controls on the Find and Replace Dialog Box: Find tab.



2. In the Search Options group box, select the test step fields to include in the search.
3. In the Find what edit box, specify the search value.

For text fields, enter a search string; wildcards are supported.

For Action or Type, select a value from the list.

4. Click Find Next to find the next match.

Review each step and make any modifications needed.

5. Continue to click Find Next to review all the matching test steps.

A message appears when there are no more matches. Click OK, then click Cancel to exit the Find dialog box.

6. Click the Save icon on the Mass Update toolbar to save your changes.

## Replacing Test Step Data

To replace test step data:

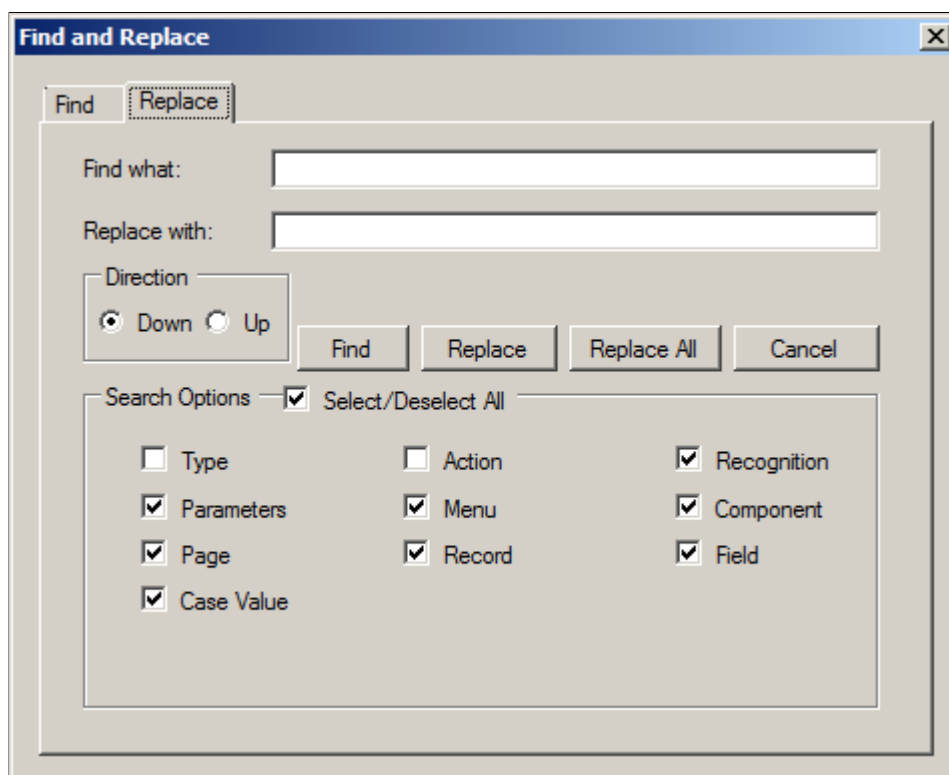
1. Click the Find icon on the Mass Update toolbar.

The Find and Replace dialog box appears, with the Find tab active.

2. Click the Replace tab to access the Replace dialog.

### Image: Mass Update - Find and Replace Dialog Box: Replace Tab

This example illustrates the fields and controls on the Find and Replace Dialog Box: Replace tab.



3. In the Search Options group box, select the test step fields to include in the search.
4. In the Find what edit box, specify the search value.

For text fields, enter a search string; wildcards are supported.

For Action or Type, select a value from the list.

5. Enter the replacement value in Replace with.

For text fields, enter the text string, for Action or Type, select a value from the list.

6. To replace all occurrences, without individually reviewing each match, click Replace All.

A message box appears indicating the number of replacements made. Click OK, then click Cancel to close the Find and Replace dialog box.

7. To review each match, click Find Next.

Either click Find Next to move to the next match without making any changes, or click Replace then Find Next to change the value and move to the next match.

Continue to click Find Next or Replace, as appropriate, to review all the remaining matching test steps.

A message appears when there are no more matches. Click OK, then click Cancel to exit the Find dialog box.

8. Click the Save icon on the Mass Update toolbar to save your changes.



# Identifying Change Impacts

---

## Understanding Change Impacts

In the course of customizations and upgrades, changes are made to, among other elements, application menus, components, pages, records, and fields. Tests that were developed prior to these changes may fail when executed against the new application. For instance, if a field is deleted, moved to another page, or renamed, any step that references that field will fail. Test developers must identify and update every step in each test that is affected by the change.

One way to identify the effects on tests is to run each test against the new application and note where the test fails. This manual process is time-consuming, expensive, and prone to errors. It also fails to identify those areas in the new application that are not covered by existing tests.

Because PeopleSoft Test Framework (PTF) test assets are PeopleTools metadata and because PTF tests incorporate references to PeopleTools metadata—that is, menus, components, pages, records, and fields—PTF is able to automate the process of correlating metadata changes with existing tests.

PTF delivers two tools that help test developers to determine the effect of changes:

- Test maintenance reports

A test maintenance report correlates PeopleTools compare report data with PTF test metadata to identify certain changes to menus, components, pages, records, and fields that may impact the PTF tests.

- Test coverage reports

A test coverage report correlates PeopleTools project data with PTF test metadata to identify menus, components, pages, records, and fields that are referenced in PTF tests.

When used in conjunction with Usage Monitor, test coverage correlations can be extended to include information on all managed objects.

A test coverage report identifies which objects included in the change project are referenced by which PTF test. Any object included in the change project that is not referenced in the PTF test metadata appears in the report identified as a coverage gap.

---

## Defining Analysis Rules

This section discusses the page used to define analysis rules.

## Defining Analysis Rules

Use the Define Analysis Rules page (PSPTTSTANLMENU) to define the priority for each of the attribute checks in a test maintenance report.

### Navigation

PeopleTools, Lifecycle Tools, Test Framework, Define Analysis Rules

### Image: Define Analysis Rules page

This example illustrates the fields and controls on the Define Analysis Rules page. You can find definitions for the fields and controls later on this page.

Analysis Category	Description	*Priority
M01	Menu does not exist	2 - Medium
M02	Component deleted from Menu	2 - Medium
M03	Component added to Menu	2 - Medium

Use the Define Analysis Rules page to define the priority for each of the attribute checks in a test maintenance report.

A test maintenance report is sorted by test name. Within each test name grouping, the report items are sorted by priority according to the values specified on the Define Analysis Rules page.

If the priority for an analysis category is set to 4 – *Ignore*, then identified impacts meeting the category criteria will not be printed in the report.

---

**Note:** Priorities are used as filters and groupings in a test maintenance report. They do not affect the actual analysis process or change what is analyzed.

---

The following table describes the analysis categories:

<b>Analysis Category</b>	<b>Description</b>
M01	Menu does not exist
M02	Component deleted from Menu
M03	Component added to Menu
C01	Page deleted from Component
C02	Page added to Component

<b><i>Analysis Category</i></b>	<b><i>Description</i></b>
C03	Search Record changed on Component
P01	Field deleted on Page
P02	Required Field added to Page
P03	Fieldname changed on Page
P04	Field Type changed on Page
P05	Field Label changed on Page
P06	Non-Required Field added to Page
P07	Recname changed on Page
P08	Recname & Fieldname changed on Page
R01	RecordField now required on Page
R02	RecordField no longer required on Page
R03	RecordField is now a Search Key
R04	RecordField no longer a Search Key
R05	RecordField is now a List Box Item
R06	RecordField no longer a List Box Item
F01	Field Type changed
F02	Field Length changed
F03	Field Format changed
F04	Field Decimal Positions changed
X01	Translate Value does not exist
X02	Translate Value added

---

## Creating Test Maintenance Reports

This section discusses how to create test maintenance reports using the Create Test Maintenance Report wizard.

Access the Create Test Maintenance Report wizard (PeopleTools, Lifecycle Tools, Test Framework, Create Test Maintenance Report).

The wizard consists of four steps:

- Step 1: Manual Tasks
- Step 2: Analyze Compare Data
- Step 3: Select an Analyzed Project
- Step 4: Generate Report

## Step 1 of 4: Manual Tasks

For a given change project the tasks for Step 1 only need to be executed once.

The first step in creating a test maintenance report comprises five manual tasks that you will complete in Application Designer to create a compare report that PTF will use as a basis for the maintenance report.

Perform these tasks to create a compare report from a project file.

Access the Create Test Maintenance Report wizard (PeopleTools, Lifecycle Tools, Test Framework, Create Test Maintenance Report).

### Image: Create Test Maintenance Report Wizard: Step 1 of 4

This example illustrates the fields and controls on the Create Test Maintenance Report Wizard: Step 1 of 4. You can find definitions for the fields and controls later on this page.

**Create Test Maintenance Report** Step 1 of 4

Create a Test Maintenance Report based on compare data and test metadata.

1 2 3 4 Restart < Previous Next >

---

**Manual Tasks**

Using App Designer, follow these tasks to create a compare report for the test maintenance process:

Task Completed	Description
<input checked="" type="checkbox"/>	Task 1: Import only the project definition for the change project.
<input checked="" type="checkbox"/>	Task 2: Rename the change project imported in Task 1 to create the snapshot project.
<input checked="" type="checkbox"/>	Task 3: Create a snapshot of the original metadata definitions by exporting the snapshot project created in Task 2 to file.
<input checked="" type="checkbox"/>	Task 4: Import the change project (definition and objects).
<input checked="" type="checkbox"/>	Task 5: Compare the snapshot project (from file) to the database, saving the compare output to tables.

As you progress through the Test Maintenance wizard the wizard tracks which tasks you have completed and which page you are on. When you exit the wizard and then return to the wizard again, the wizard sends you to the last visited page.

This tracking is done according to user ID. This means that if two users share the same user ID, the second user might not enter the first page when accessing the wizard. The wizard will take the second user to where the previous user left the wizard.

If two users with different user IDs work on the same project, the wizard does not track the state for the second user. For instance, if the first user completed the tasks for Step 1, the second user needs to check the five tasks on Step 1 to bypass that step.

**Task 1: Import only the project definition for the change project.**

Suppose you are about to apply a change project named `SA_PROJ_UPGD`. Before the change project is applied, import the change project, `SA_PROJ_UPGD`, as a project definition only.

1. In Application Designer, select Tools, Copy Project, From File.
2. In the selection box, highlight the change project, `SA_PROJ_UPGD`.
3. Click Select.

The Copy From File dialog box appears.

4. Click the Deselect All button to deselect all of the definition types so that only the empty project structure is imported.

At this point, you are importing only the names of the definitions into the project. None of the actual definitions in the upgrade project are copied.

If a definition exists in the original database with the same name as a definition in the upgrade project, the upgrade project in the database will (correctly) contain the original, unmodified definition of the object.

5. Click Copy.

**Task 2: Rename the change project imported in Task 1 to create the snapshot project.**

Create a copy of the change project, `SA_PROJ_UPGD`.

Select File, Save Project As and name the new project `SA_PROJ_SNAP`.

Creating the Snapshot Project is required to avoid naming conflicts later in the process.

**Task 3: Create a snapshot of the original metadata definitions by exporting the snapshot project created in Task 2 to file.**

Export the snapshot project, `SA_PROJ_SNAP`, to file:

1. Select Tools, Copy Project, To File.
2. If this project is large, as upgrades often are, you can save time during the compare process by deselecting all definitions in the Copy Options window, except for the five definitions that are referenced by PTF tests:
  - Menus
  - Components
  - Pages
  - Records
  - Fields

3. Accept the defaults and click OK.

**Task 4: Import the change project (definition and objects).**

Import the original change project, SA\_PROJ\_UPGD, from file:

1. Select Tools, Copy Project, From File.
2. Include all the definition types.

At this point, the database contains the new metadata.

**Task 5: Compare the snapshot project (from file) to the database, saving the compare output to tables.**

Compare the current (target) database with the pre-change (source) project, SA\_PROJ\_SNAP:

1. Select Tools, Compare and Report, From File.
2. Highlight the snapshot project, SA\_PROJ\_SNAP, and click the Select button.

The Replace existing SA\_PROJ\_SNAP? dialog box appears.

3. Click Yes.

The Compare and Report From File dialog box appears.

4. Click Options to access the Upgrade Options dialog box.
5. Select the Report Options tab.
6. Select the Generate Output to Tables check box.
7. Select the Report Filter tab.
8. Click Select All.
9. Click OK.
10. Click Compare.

The wizard will use data from this compare report to create the test maintenance report.

## Step 2 of 4: Analyze Compare Data

This example shows Step 2 of 4:

### Image: Create Test Maintenance Report Wizard: Step 2 of 4

This example illustrates the fields and controls on the Create Test Maintenance Report Wizard: Step 2 of 4. You can find definitions for the fields and controls later on this page.

## Create Test Maintenance Report

Step 2 of 4

Create a Test Maintenance Report based on compare data and test metadata.


1
2
3
4

Restart
< Previous
Next >

### Analyze Compare Data

Analyze existing compare data and generate data on impact to PeopleSoft Test Framework metadata.

#### Select a Compare Report to Analyze

Find | View All |  First 1-2 of 2 Last

Project Name	Compare Date/Time	Compare Type		Last Analysis
INSTRUCTOR	05/08/2012 9:23:17AM	<input type="text"/>	Analyze	
PO_PROJ_SNAP	05/07/2012 5:52:15PM	From File	Analyze	

For a given change project the tasks for Step 2 only need to be executed once. This analysis is based only on the compare data, not on the test data, so changes to tests do not affect the result. The relationship between this analysis and test data is calculated in Step 3: Generate Impact Report. You may generate multiple Impact Reports based on a single analysis as tests change.

In this step, PTF analyzes data from the compare you performed in Wizard Step 1, Task 5.

1. For the project compare report you created in Wizard Step 1, Task 5, specify whether the Compare Type is *From File* or *To Database*.
2. Click Analyze.

This will launch the Application Engine program PSPTANALYSIS.

3. When the analysis is complete a pop-up appears. Click Next to continue.

**Note:** A project name can appear more than once in the list because the Compare Output to Table feature stores data by both project name and compare date/time. The most recent compare will appear first in the list.

## Step 3 of 4: Select an Analyzed Project

This example shows Step 3 of 4:

### Image: Create Test Maintenance Report Wizard: Step 3 of 4

This example illustrates the fields and controls on the Create Test Maintenance Report Wizard: Step 3 of 4. You can find definitions for the fields and controls later on this page.

**Create Test Maintenance Report** Step 3 of 4

Create a Test Maintenance Report based on compare data and test metadata.

1 2 3 4

Restart < Previous Next >

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**Select an Analyzed Project**

Select an analyzed project to report its impact on the PeopleSoft Test Framework metadata.

Please select a project. Find | View All | First 1 of 1 Last

Project Name	Compare Date/Time	Analysis Date/Time	Compare Type	Delete
PO_PROJ_SNAP	05/07/2012 5:52:15PM	05/08/2012 9:46:47AM	From File	<input type="checkbox"/>

Delete Selected

Use this page to select the analysis data PTF will use to generate the report.

Sets of compare data are listed by project name, the date and time the compare was generated, and the date and time the analysis was run.

Select the Delete check box and click Delete Selected to delete analyses.

## Step 4 of 4: Generate Report

This example shows Step 4 of 4:



### Image: Create Test Maintenance Report Wizard: Step 4 of 4

This example illustrates the fields and controls on the Create Test Maintenance Report Wizard: Step 4 of 4. You can find definitions for the fields and controls later on this page.

**Create Test Maintenance Report** Step 4 of 4

Create a Test Maintenance Report based on compare data and test metadata.

1 2 3 4 Restart < Previous Next >

**Generate Report**

Generate a report of the impact to existing tests for the selected compare data.

**Folder** \\PeopleTools Development \\Core

**Search For Tests By** Name

Search

Select Test(s) for Test Maintenance Report		
Test Parent Folder	Test Name	Description
<input type="checkbox"/> \\PeopleTools Development \\Core\\TA	PTD_PIA_TA_HTMLSTR_01	PTD_PIA_TA_HTMLSTR_01

Select All Clear All

**Report Format**

☒ PIA ☐ BI Publisher

Generate Report

For a given change project you will use this page to generate multiple reports as changes are made to the PTF test metadata. As you make changes to tests based on the results of this report, rerun the report to verify that the issues were corrected. You can run this report repeatedly as you make changes to tests without having to redo steps 1 through 3 of the Create Test Maintenance Report wizard.

To generate a report:

1. Select one or more tests in the Select Test(s) for Test Maintenance Report grid to use for the report.

Use the Folder and Search for Tests By fields along with the Search button to filter the list of tests that are available to select for the report:

- Select a value in the Folder list to specify the PTF Explorer Tree level to include. To include test from all folders, leave this field blank.
- To include only tests that match a test name or description, select *Name* or *Desc* from the Search for Tests By list, then enter the search string in the adjacent edit box.

Click Search to populate the Select Test(s) for Test Maintenance Report grid with the tests that match the criteria specified.

2. Select the report format.
3. Click Generate Report to create the report.

The following fields are on the Create Test Maintenance Report Wizard: Step 4 of 4 page:

<b>Folder</b>	To limit the report to tests from a specific folder, select the level of the PTF Explorer Tree to include. To include tests from all folders, leave this field blank.
<b>Search for Tests By</b>	Select <i>Name</i> to search for reports by test name, or <i>Desc</i> to search for reports by their description.  Enter the search string in the adjacent edit box. To retrieve all reports, leave the edit box blank.
<b>Search</b>	Click to populate the Select Test(s) for Test Maintenance Report grid with the tests that match the criteria specified.
<b>Select All</b>	Click to select all tests that are listed in the Select Test(s) for Test Maintenance Report grid.
<b>Clear All</b>	Click to deselect all tests that are listed in the Select Test(s) for Test Maintenance Report grid.
<b>Report Format</b>	Select the report output format. Options are: <ul style="list-style-type: none"> <li>• PIA - View the report in the application browser.</li> <li>• XML Publisher - Create an XML formatted text file.</li> </ul>
<b>Generate Report</b>	Click to create the report.

## Running a Test Report from PTF Client

As you modify a test based on the results of a maintenance report, you can validate the test by running a test report from the PTF client. The report is generated for a single test, using analyses generated in Step 2 of the Test Maintenance Wizard.

1. In PTF Explorer, right-click on a test.
2. From the context menu, select Validate Test.
3. The Validate Test – Analysis Project list dialog box appears.
4. Select an analysis from the list and click Open.

The test maintenance report opens in a new window in the PTF client.

## Interpreting Test Maintenance Reports

A test maintenance report lists the tests that have been impacted by changes to menus, components, records, pages, and fields, and details the changes that impacted those tests. You can choose to output the report to PIA or to BI Publisher .

### Image: Example of a Test Maintenance Report in BI Publisher Format

This example illustrates a test maintenance report in PI Publisher format.

Test Maintenance Report Project Name SA_PROJ_SNAP_852			
<b>Test Name: INSTRUCTORS</b>			
2 - Medium	F01F Field	INTERNAL_EXTERNAL	Changed
		Step ID: 31 Seq. Nbr: 31 Status: Active Language: EN Pre Object Value: INTERNAL_EXTERNAL Post Object Value: INTERNAL_EXTERNAL.Character	
2 - Medium	F04F Field	INTERNAL_EXTERNAL	Changed
		Step ID: 31 Seq. Nbr: 31 Status: Active Language: EN Pre Object Value: INTERNAL_EXTERNAL Post Object Value: INTERNAL_EXTERNAL.0	
2 - Medium	P01F Page	PSU_INSTR	Deleted
		Step ID: 32 Seq. Nbr: 32 Status: Active Language: EN Pre Object Value: PSU_INSTR_TBL.MANAGER Post Object Value:	
2 - Medium	P05F Page	PSU_INSTR	Changed
		Step ID: 11 Seq. Nbr: 11 Status: Active Language: EN Pre Object Value: PSU_INSTR_TBL.FIRST_NAME.First Name Post Object Value: PSU_INSTR_TBL.FIRST_NAME.First	
<b>Test Name: RESERVED WORDS</b>			
2 - Medium	C01F Component	PSU_STUDENT	Deleted
		Step ID: 6 Seq. Nbr: 5 Status: Active Language: ENG Pre Object Value: PSU_STUDENT_SKED Post Object Value:	
2 - Medium	C01F Component	PSU_STUDENT	Deleted
		Step ID: 7 Seq. Nbr: 6 Status: Active Language: ENG Pre Object Value: PSU_STUDENT_SKED Post Object Value:	
2 - Medium	C01F Component	PSU_STUDENT	Deleted
		Step ID: 8 Seq. Nbr: 7 Status: Active Language: ENG Pre Object Value: PSU_STUDENT_SKED Post Object Value:	
2 - Medium	C01F Component	PSU_STUDENT	Deleted
		Step ID: 13 Seq. Nbr: 8 Status: Active Language: ENG Pre Object Value: PSU_STUDENT_SKED Post Object Value:	

### Image: Example of a Test Maintenance Report in PIA Format

This example illustrates a test maintenance report in PIA format.

Project Name: SA_PROJ_SNAP													
Compare Date/Time: 07/16/2010 5:14:06PM      Analysis Date/Time: 07/16/2010 5:15:09PM													
Tests with Impacted Objects													
Test Name	Priority	Category	Object Type	Object Name	Market	Command ID	Seq Nbr	Status	Object Action	Pre Object Value	Post Object Value	Description	
INSTRUCTORS	2 - Medium	P001	Pages	PSU_INSTR			32	32	Active	Deleted	PSU_INSTR_TBL.MANAGER		Field deleted on Page
INSTRUCTORS	2 - Medium	P003	Pages	PSU_INSTR			0	0	Active	Added		PSU_INSTR_TBL.CURR_DEV_FLAG	Field added to Page (Compare Type File)
INSTRUCTORS	2 - Medium	P003	Pages	PSU_INSTR			0	0	Active	Added		PSU_INSTR_TBL.CURR_DEV_FLAG	Field added to Page (Compare Type File)
INSTRUCTORS	2 - Medium	P006	Pages	PSU_INSTR			11	11	Active	Changed	PSU_INSTR_TBL.FIRST_NAME First Name	PSU_INSTR_TBL.FIRST_NAME First	Field Label changed on Page
INSTRUCTORS	2 - Medium	P006	Pages	PSU_INSTR			32	32	Active	Changed	PSU_INSTR_TBL.MANAGER Manager	PSU_INSTR_TBL.MANAGER	Field Label changed on Page
STUDENTS	2 - Medium	P003	Pages	PSU_STUDENT_PERS			0	0	Active	Added		PSU_STUDENT_TBL.PHONE	Field added to Page (Compare Type File)
TRN_STUDENT_04	2 - Medium	P003	Pages	PSU_STUDENT_PERS			0	0	Active	Added		PSU_STUDENT_TBL.PHONE	Field added to Page (Compare Type File)

From a PIA report, you can click the Download icon to output the report to a spreadsheet. The following example shows a report in spreadsheet format:

**Image: Example of a Test Maintenance Report in Spreadsheet Format**

This example illustrates a test maintenance report that has been downloaded in spreadsheet format.

ps.xls [Read-Only]													
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Test Name	Priority	Category	Object Type	Object Name	Market	Step ID	Seq Nbr	Status	Object Action	Pre Object Value	Post Object Value	Description
2	INSTRUCTORS	2 - Medium	F01F	Field	INTERNAL_EXTERNAL		31	31	Active	Changed	INTERNAL_EXTERNAL	haracter	Type File)
3	INSTRUCTORS	2 - Medium	F04F	Field	INTERNAL_EXTERNAL		31	31	Active	Changed	INTERNAL_EXTERNAL	INTERNAL_EXTERNAL	Field Decimal Positions changed (Compare Type File)
4	INSTRUCTORS	2 - Medium	P01F	Page	PSU_INSTR		32	32	Active	Deleted	PSU_INSTR_TBL.MANAGER		Type File)
5	INSTRUCTORS	2 - Medium	P05F	Page	PSU_INSTR		11	11	Active	Changed	PSU_INSTR_TBL.FIRST_NAME	PSU_INSTR_TBL.FIRST_NAME.First	Field Label changed on Page (Compare Type File)
6	RESERVED_WORDS	2 - Medium	C01F	Component	PSU_STUDENT	Global	6	5	Active	Deleted	PSU_STUDENT_SKED		Page deleted from Component (Compare Type File)
7	RESERVED_WORDS	2 - Medium	C01F	Component	PSU_STUDENT	Global	7	6	Active	Deleted	PSU_STUDENT_SKED		Page deleted from Component (Compare Type File)
8	RESERVED_WORDS	2 - Medium	C01F	Component	PSU_STUDENT	Global	8	7	Active	Deleted	PSU_STUDENT_SKED		Page deleted from Component (Compare Type File)
9	RESERVED_WORDS	2 - Medium	C01F	Component	PSU_STUDENT	Global	13	8	Active	Deleted	PSU_STUDENT_SKED		Page deleted from Component (Compare Type File)
10	RESERVED_WORDS	2 - Medium	C01F	Component	PSU_STUDENT	Global	14	9	Active	Deleted	PSU_STUDENT_SKED		Page deleted from Component (Compare Type File)

**Image: Example of a Test Maintenance Report in PTF Client**

This example illustrates a test maintenance report in the PTF Client.

Maintenance Report

Test Name: INSTRUCTORS

Project Name: SA\_PROJ\_SNAP\_852

Analysis Seq: 1

Run DateTime: 7/22/2011 9:40:05 PM

DateTime Stamp: 7/22/2011 9:41:15 PM

AnalysisCategory	Priority	Step ID	LanguageCode	SeqNbr	CommandStatus	ObjectType	ObjectDescription	ObjectName
P01F	2	32	EN	32	A	5	Page	PSU_INSTR
P05F	2	11	EN	11	A	5	Page	PSU_INSTR
F01F	2	31	EN	31	A	2	Field	INTERNAL_EX
F04F	2	31	EN	31	A	2	Field	INTERNAL_EX

OK

The following columns are on a Test Maintenance report (test data may be positioned differently depending on the report format):

Column Name	Description
Test Name	The test that is impacted by a change.
Priority	A test maintenance report is sorted by test name. Within each test name grouping, the report items are sorted by priority, according to the values specified on the Define Analysis Rules page.  See <a href="#">Defining Analysis Rules</a> .

<b>Column Name</b>	<b>Description</b>
Category	Which category the change belongs to, as detailed on the Define Analysis Rules page.  See <a href="#">Defining Analysis Rules</a> .
Object Type	The type of definition that was changed: <ul style="list-style-type: none"> <li>• Menu</li> <li>• Component</li> <li>• Page</li> <li>• Record</li> <li>• Field</li> </ul>
Object Name	The name of the object that was changed.
Market	For components, the market; for instance, GBL.
Step ID	A unique and unchanging identifier for a step in a test. Each step has a Step ID and a Sequence Number, but the Sequence Number, unlike the Step ID, changes when steps are added or deleted from a test.
Seq. Nbr	The sequence number for the test step reflects the relative run order position of the step within the test.
Status	Indicates whether, within the test, the step is active or inactive.
Object Action	Indicates whether the object was: <ul style="list-style-type: none"> <li>• Changed</li> <li>• Added</li> <li>• Deleted</li> </ul>
Pre Object Value	The value before the object was changed.
Post Object Value	The value after the object was changed.
Description	A brief description of the change.

---

## Understanding Test Coverage Reports

In addition to being a record and playback tool, PTF is one element of the broader PeopleTools Lifecycle Management framework, which provides greater visibility into how organizations use their PeopleSoft environments, and how changes to PeopleSoft managed objects might impact their business processes.

Documenting business process tests in PTF enables you to correlate business processes to the underlying managed objects. Using PTF in conjunction with Usage Monitor provides you with even greater levels of information about the objects used in your system.

Test Coverage reports leverage PTF integration with PeopleTools to provide this information to you in a usable form.

---

## Creating Test Coverage Reports

By default, a test coverage report correlates PeopleTools project data with PTF test metadata to identify components, menus, pages, records and fields that are referenced in PTF Tests.

When used in conjunction with Usage Monitor, test coverage correlations can be extended to include information on additional PeopleTools managed objects, such as PeopleCode.

A test coverage report identifies which objects included in the change project are referenced by which PTF test. Any object included in the change project that is not referenced in the PTF test metadata will appear in this report, identified as a coverage gap.

All the projects in the database are listed, sorted with most recent first. Click the column headings to change the sort order.

PTF generates a coverage report based on a change project. Select the project you want PTF to use to generate the report.

The wizard consists of two steps:

- Step 1: Select a Project.
- Step 2: Generate Report.

### Step 1 of 2: Select a Project

Use the Create Test Coverage Report page (PSPTTSTCOVERAGESSEL) to select the projects to include in the test coverage report.

## Navigation

PeopleTools, Lifecycle Tools, Test Framework, Create Test Coverage Report

### Image: Create Test Coverage Report Wizard: Step 1 of 2

This example illustrates the fields and controls on the Create Test Coverage Report Wizard: Step 1 of 2. You can find definitions for the fields and controls later on this page.

## Create Test Coverage Report

Create a Test Coverage Report based on a project definition and test metadata.

1
2

Previous
Next

Please select a Project.

Select a Project for the Test Coverage Report			Find   View 100	First	1-15 of 202	Last
<input type="radio"/>	Project Name	Project Description	Last Update Date/Time			
<input type="radio"/>	QE854_903I1	Increm Proj for QE8.54_903I1	05/06/2014 6:44:27PM			
<input type="radio"/>	PTFTLSPROJ		05/06/2014 6:43:01PM			
<input type="radio"/>	PPLDELETE	Deleted PeopleTools Objects	05/06/2014 6:42:34PM			
<input type="radio"/>	PPLTLS84CUR	Composite PeopleTools Maintena	05/06/2014 6:40:38PM			
<input type="radio"/>	PPLTOOLS	Composite PeopleTools Project	05/06/2014 6:38:26PM			
<input type="radio"/>	PT854_903I1	Increm Proj for PT8.54_903I1	05/06/2014 3:24:25PM			
<input type="radio"/>	QEDMO854	Comp Proj for QE8.54	05/06/2014 8:53:14AM			
<input type="radio"/>	QEDMOALL	Composite QE Project	05/06/2014 8:51:08AM			
<input type="radio"/>	QE_ASIVADAS_854_903I1		05/05/2014 5:34:54PM			
<input type="radio"/>	PT854_902R1	Increm Proj for PT8.54_902R1	04/29/2014 11:08:52AM			
<input type="radio"/>	QE854_902I1	Increm Proj for QE8.54_902I1	04/22/2014 5:01:28PM			
<input type="radio"/>	PTPCRECOMPILE		04/22/2014 3:57:08PM			
<input type="radio"/>	PT854_902I1	Increm Proj for PT8.54_902I1	04/22/2014 10:23:00AM			
<input type="radio"/>	QE854_901R1	Increm Proj for QE8.54_901R1	04/15/2014 4:31:16PM			
<input type="radio"/>	PT854_901R1	Increm Proj for PT8.54_901R1	04/14/2014 4:10:34PM			

Select a change project to be correlated with PTF metadata and click Next.

## Step 2 of 2: Generate Report

This example shows step 2 of 2:

### Image: Create Test Coverage Report Wizard: Step 2 of 2

This example illustrates the fields and controls on the Create Test Coverage Report Wizard: Step 2 of 2.

### Create Test Coverage Report

Create a Test Coverage Report based on a project definition and test metadata.

1
2

Previous
Next

Project Name PT854\_901R1  
Last Update Date/Time 04/14/2014 4:10:34PM

Folder

Search For Tests By
Name
PTD\_AC
Search

Generate report for either all Tests or select a maximum of 10 Tests

Select Test(s) for the Test Coverage Report			
	Test Parent Folder	Test Name	Description
<input type="checkbox"/>	\\PeopleTools Development\\Analytic Tools\\Analytic Engine (ACE)	PTD_ACE_ACCESS_CUBE_FILTER	
<input type="checkbox"/>	\\PeopleTools Development\\Analytic Tools\\Analytic Engine (ACE)	PTD_ACE_GEN_TESTCASES	
<input type="checkbox"/>	\\PeopleTools Development\\Analytic Tools\\Analytic Engine (ACE)	PTD_ACE_MDL_VWR	
<input type="checkbox"/>	\\PeopleTools Development\\Analytic Tools\\Analytic Engine (ACE)	PTD_ACE_Z_DUMMY	
<input type="checkbox"/>	\\PeopleTools Development\\Porting, Database and Platform\\Automated Config Manager (ACM)	PTD_ACM_TEMPLATE_CREATION	ACM Template Creation
<input type="checkbox"/>	\\PeopleTools Development\\Porting, Database and Platform\\Automated Config Manager (ACM)	PTD_ACM_TEMPLATE_RUN	ACM Template Run Configuration

Select All
Clear All

Report Format

PIA
BI Publisher

Include Usage Monitor Data

Usage Monitor Rpt

Generate Report

To generate the report:

1. Select one or more tests in the Select Test(s) for the Test Coverage Report grid to use for the report.

Use the Folder and Search for Tests By fields along with the Search button to filter the list of tests that are available to select for the report:

- Select a value in the Folder list to specify the PTF Explorer Tree level to include. To include tests from all folders, leave this field blank.



- To include only tests that match a test name or description, select *Name* or *Desc* from the Search for Tests By list, then enter the search string in the adjacent edit box.

Click Search to populate the Select Test(s) for the Test Coverage Report grid with the tests that match the criteria specified.

2. Select the report format.
3. Click Generate Report to create the report.

The following fields are on the Create Test Coverage Report Wizard: Step 2 of 2 page:

<b>Folder</b>	To limit the report to tests from a specific folder, select the level of the PTF Explorer Tree to include. To include tests from all folders, leave this field blank.
<b>Search for Tests By</b>	Select <i>Name</i> to search for reports by test name, or <i>Desc</i> to search for reports by their description.  Enter the search string in the adjacent edit box. To retrieve all reports, leave the edit box blank.
<b>Search</b>	Click to populate the Select Test(s) for Test Coverage Report grid with the tests that match the criteria specified.
<b>Select All</b>	Click to select all tests that are listed in the Select Test(s) for Test Coverage Report grid.
<b>Clear All</b>	Click to deselect all tests that are listed in the Select Test(s) for Test Coverage Report grid.
<b>Report Format</b>	Select the report output format. Options are: <ul style="list-style-type: none"> <li>• PIA - View the report in the application browser.</li> <li>• XML Publisher - Create an XML formatted text file.</li> </ul>
<b>Usage Monitor Rpt</b>	Select to include Usage Monitor data in a test coverage report. You need to generate Usage Monitor data while creating your tests.  See <a href="#">Using Usage Monitor Data with PTF</a> .
<b>Generate Report</b>	Click to create the report.

---

## Using Usage Monitor Data with PTF

PTF used by itself tracks the use of five step types – records, menus, fields, pages, and components. You can use PTF together with Usage Monitor to track additional PeopleTools managed objects used in the course of a test. This data can then be correlated with change projects (that is, fixes or bundles) to determine which tests need to be executed to test the change project.

For example, suppose you have 100 PTF tests in your test repository. You receive a bundle from PeopleSoft that consists of updates to ten PeopleCode objects. Based solely on the data stored by PTF, you cannot determine which PTF tests you need to run to test the bundle, because PTF does not track references to PeopleCode.

You can use Usage Monitor in conjunction with PTF to address this issue. Usage Monitor tracks references to additional PeopleTools managed objects, including PeopleCode. When you associate a test and test case with Usage Monitor all the actions taken while Usage Monitor is active are associated with the test and test case you specified.

A test coverage report correlates project data, PTF data, and Usage Monitor data to identify, in this example, which PTF Tests in the test repository reference one or more of the PeopleCode objects delivered in the bundle.

## Configuring Usage Monitor

Your system administrator must configure Performance Monitor and Usage Monitor before you use Usage Monitor with PTF.

See *PeopleTools: Performance Monitor*

## Generating Usage Monitor Data

Follow these steps to generate Usage Monitor data along with PTF test data:

1. Create a new test in PTF.
2. Launch the Recorder.
3. Hook the browser.
4. Start recording.
5. In the PeopleSoft application browser, select Usage Monitoring from the main menu.

---

**Note:** Your PTF environment and the application you are testing must be on the same database.

---

6. The Test Data page appears.
7. Enter Test Name and Test Case.
8. Click Start test.
9. Record the test steps.
10. When you are finished with the test steps, return to the Usage Monitoring page and select Stop Test.
11. In the PTF Recorder click the Stop Recording icon.

## Administering Usage Monitor for PTF

Before Usage Monitor data can be used in a coverage report it must be aggregated.

To aggregate the Usage Monitor Data:

1. Navigate to PeopleTools, Process Scheduler, System Process Requests.
2. Enter a run control ID or create a new one.
3. Click Run.
4. Select Usage Monitor Aggregator (PTUMAGR) from the list.
5. Click OK to Run the process.

**Note:** We recommend that you schedule the Usage Monitor Aggregator Process to execute hourly or daily to keep the data in the aggregated data table current. Once data has been aggregated the raw data can be purged to reduce disk space usage.

To verify that Usage Monitor is collecting data, run this query in your query tool:

```
SELECT * FROM PSPMTRANS35_VW;
```

The PSPMTRANS35\_VW represents the correct logical view of the raw Usage Monitor data.

**Note:** For any Usage Monitor data to appear in the view, the Usage Monitor buffers need to have been flushed at least once. By default the buffer size is set to 500 unique object references. While you are configuring and testing your Usage Monitor setup you might find it useful to reduce the size of the buffer (PeopleTools, Performance Monitor, Administration, System Defaults).

To verify that Usage Monitor Data has been aggregated correctly, run this query in your query tool:

```
SELECT * FROM PSPTUMPMTAGR;
```

## Interpreting Test Coverage Reports

Use a Test Coverage report to determine which objects in a change package have tests and which do not. Objects without a test represent a potential gap in the test coverage.

This is an example of a test coverage report in PIA format:

### Image: Example of a Test Coverage Report

This example illustrates a test coverage report in PIA format.

Project Name: SA_PROJ_SNAP_852					
Impacted Objects and Objects with No Coverage				First 1-25 of 63 Last	
Test Name	Object Type	Object Name	Object Detail	Test Metadata	Usage Monitor Data
** No Test Coverage **	Page	PSU_COURSE		No Data	No Data
** No Test Coverage **	Page	PSU_COURSE_MATL		No Data	No Data
** No Test Coverage **	Page	PSU_INSTR_PHOTO		No Data	No Data
** No Test Coverage **	Panel Group PeopleCode	PSU_CUST	GBL SavePostChange	No Data	No Data
** No Test Coverage **	Panel Group Record Field PeopleCode	PSU_INSTR	GBL DERIVED_ED_SVCS.DELETE_BTN FieldChange	No Data	No Data
** No Test Coverage **	Panel Group Record Field PeopleCode	PSU_INSTR	GBL DERIVED_ED_SVCS.INSERT_BTN FieldChange	No Data	No Data
** No Test Coverage **	Translate	INTERNAL_EXTERNAL	O.2010-07-16	No Data	No Data
INSTRUCTORS	Component	PSU_INSTR		Active	No Data
INSTRUCTORS	Field	INTERNAL_EXTERNAL		Active	No Data
INSTRUCTORS	Page	PSU_INSTR		Active	No Data
INSTRUCTORS	Record	PSU_INSTR_TBL		Active	No Data
RESERVED_WORDS	Component	PSU_STUDENT	GBL	Active	No Data

The following columns are on a Test Coverage report (test data may be positioned differently depending on the report format):

<b>Column Name</b>	<b>Description</b>
Test Name	The test that is impacted by a change.
Object Type	The type of definition that was in the change project.
Object Name	The primary key of the object.
Object Detail	The additional keys (as applicable) required to uniquely identify the object.
Test Metadata	<p>If the object is referenced in a PTF test, this value will be <i>Active</i> or <i>Inactive</i>, reflecting whether within the test, the referenced step is active or inactive.</p> <p>If the object is not referenced in a PTF test, this value will be <i>No Data</i>. This scenario can occur when the Include Usage Monitor Data checkbox is selected and the value in the Usage Monitor Data column is Yes.</p>
Usage Monitor Data	When the Include Usage Monitor Data checkbox is selected this value will be <i>Yes</i> or <i>No</i> . When the Include Usage Monitor Data checkbox is deselected the value will be set to <i>No Data</i> .

---

## Running Test Details Reports

A test details report is an HTML file with details for a PTF test and its associated test cases, including comments in rich text format with images.

Use the Create Test Details Report page (PSPTTSTDTLRUNCNTL) to run a test details report.

## Navigation

PeopleTools, Lifecycle Tools, Test Framework, Create Test Details Report

### Image: Create Test Details Report Page

This example illustrates the fields and controls on the Create Test Details Report page.

**Create Test Details Report**  
Create a Test Details Report based on test metadata.

[Report Manager](#) [Process Monitor](#) [Run Report](#)

**Folder** \PeopleTools Development\Analytic Tools\Charting (CHART) ▼

**Search For Tests By** Name ▼

[Search](#)

Select from 1 to 10 Tests		
Test Parent Folder	Test Name	Description
<input type="checkbox"/> \PeopleTools Development\Analytic Tools\Charting (CHART)	PTD_CHART_ORG_BASICS	Basic tests for Org Chart
<input type="checkbox"/> \PeopleTools Development\Analytic Tools\Charting (CHART)	PTD_CHART_RB_BASICS	Basic test for RB chart
<input type="checkbox"/> \PeopleTools Development\Analytic Tools\Charting (CHART)	PTD_CHART_Z_DUMMY	

To run the Test Detail report:

1. Select a minimum of one to a maximum of ten tests in the Select from 1 to 10 Tests grid to use for the report.

Use the Folder and Search for Tests By fields along with the Search button to filter the list of tests that are available to select for the report:

- Select a value in the Folder list to specify the PTF Explorer Tree level to include. To include tests from all folders, leave this field blank.
- To include only tests that match a test name or description, select *Name* or *Desc* from the Search for Tests By list, then enter the search string in the adjacent edit box.

Click Search to populate the Select from 1 to 10 Tests grid with the tests that match the criteria specified.

2. Click Run Report to create the report.

**Note:** The run control is automatically generated by the system and the report is scheduled. You can use the Process Monitor link to check the report status and the Report Manager link to view the report.

### Image: Example Test Details Report

This example illustrates a test details report.

PeopleSoft Test Framework					
Test Details Report					
<b>Test Name:</b>	PB_USER_PROFILE_SHORT	<b>Type:</b>	Test	<b>Message Recognition:</b>	Y
Example for Test Details					
<b>Test Comments:</b> This test example has the first few steps removed to show details for a typical step. All test cases have been removed except CASE_01 to simplify the report.					
<b>Test Case Information</b>					
<b>Test Case Name:</b>			CASE_01		
<b>Comments:</b>					
<b>Test Steps</b>					
1	Active	Page.Prompt	MAINTAIN_SECURITY.USER_SAVEAS.GBL	Command Id: 10	Language: ENG
		<i>Object Properties</i>	<i>Menu:</i> MAINTAIN_SECURITY	<i>Component:</i> USER_SAVEAS.GBL	
			<i>Page:</i> (SEARCH)	<i>PageField:</i>	
			<i>Record:</i>	<i>Field:</i>	
<b>Comments:</b>					
The step uses the Page Prompt construct instead of explicit navigation.					
<b>Test Case Details:</b>					
CASE_01			Value: update		

## Creating a Test Compare Report

Use the Create Test Compare Report page (PSPTTSTCOMPARESEL) to run a test compare report based on a project file.

See [Creating Test Maintenance Reports](#)

## Navigation

PeopleTools, Lifecycle Tools, Test Framework, Create Test Compare Report

### Image: Create Test Compare Report Page

This example illustrates the fields and controls on the Create Test Compare Report Page. You can find definitions for the fields and controls later on this page.

**Create Test Compare Report**

Create a Test Compare Report based on output data from previous project compares.

1 2 Previous Next

Project Name EP92PROD\_C358\_CHANGED

Run Date/Time 05/30/14 9:38:52AM

\*Search For Tests By Name  Search

Generate report for either all Tests or select a maximum of 10 Tests

Select Test(s) to Create Compare Report Find | View All | First 1 of 1 Last

	Test Name	Description
<input checked="" type="checkbox"/>	TC_12_06_COPY_TEMPLATE_03	My Profile page

Select All Clear All

Report Format

☒ PIA ☐ Excel

Generate Report

To generate the report:

1. Select one or more tests in the Select Test(s) to Create Compare Report grid to use for the report.

To list only tests that match a test name or description, select *Name* or *Desc* from the Search for Tests By list, enter the search string in the adjacent edit box, then click Search to populate the Select Test(s) to Create Compare Report grid with the tests that match the criteria specified.

2. Select the report format.
3. Click Generate Report to create the report.

The following fields are on the Create Test Compare Report page:

#### Search for Tests By

Select *Name* to search for reports by test name, or *Desc* to search for reports by their description.

Enter the search string in the adjacent edit box. To retrieve all reports, leave the edit box blank.

### Search

Click to populate the Select Test(s) to Create Compare Report grid with the tests that match the criteria specified.

### Select All

Click to select all tests that are listed in the Select Test(s) to Create Compare Report grid.

### Clear All

Click to deselect all tests that are listed in the Select Test(s) to Create Compare Report grid.

### Report Format

Select the report output format. Options are:

- PIA - View the report in the application browser.
- Excel - Create a Microsoft Excel file.

### Generate Report

Click to create the report.

### Image: Example of a test compare report in PIA format

This example illustrates a test compare report in PIA format.

Project Name

EP92PROD\_C358\_CHANGED

Report Type

PIA

Run Date/Time

05/30/2014 9:38:52AM

Test Compare Report

Find | View All | 12

First 1-11 of 11 Last

Test Name	Test Case Name	Command ID	Attribute	Source	Target
TC_12_06_COPY_TEMPLATE_03			Version	8.53.12A	8.53.10A-B1
TC_12_06_COPY_TEMPLATE_03		17	Rec&Field		GROUP_NAME
TC_12_06_COPY_TEMPLATE_03		65	Object ID	TUS\$53\$&25591_Row1	TUS\$67\$&25591_Row1
TC_12_06_COPY_TEMPLATE_03		67	Object ID	ES\$56\$&25591_Row1	ES\$51\$&25591_Row1
TC_12_06_COPY_TEMPLATE_03		68	Object ID	SURE\$58\$&25591_Row1	SURE\$52\$&25591_Row1
TC_12_06_COPY_TEMPLATE_03		69	Object ID	\$60\$&25591_Row1	\$53\$&25591_Row1
TC_12_06_COPY_TEMPLATE_03		74	Object ID	ID=VENDOR_NAME1&25591_Row2	ID=VENDOR_NAME1\$50\$&25591_Row2
TC_12_06_COPY_TEMPLATE_03		75	Object ID	TUS\$53\$&25591_Row2	TUS\$67\$&25591_Row2
TC_12_06_COPY_TEMPLATE_03		77	Object ID	ES\$56\$&25591_Row2	ES\$51\$&25591_Row2
TC_12_06_COPY_TEMPLATE_03		78	Object ID	SURE\$58\$&25591_Row2	SURE\$52\$&25591_Row2
TC_12_06_COPY_TEMPLATE_03		79	Object ID	\$60\$&25591_Row2	\$53\$&25591_Row2

Return

## Creating Test Matrix Reports

The Matrix Details report enables you to view the top level parent and child test(s) for the test(s) that you specify.

To create a Matrix Details report, access the Matrix Details Report page (PSPTTSTRELGEN).



## Navigation

PeopleTools, Lifecycle Tools, Test Framework, Create Test Matrix Report

### Image: Matrix Details Report Page

This example illustrates the fields and controls on the Matrix Details Report page.

**Test Matrix Report**

**Search Criteria**

Folder

Search For Tests By

Project

Generate report for either all Tests or select a maximum of 10 Tests

**Select Test(s) to Matrix Report** Find | View All | | First 1-9 of 9 Last

<input type="checkbox"/>	Test Parent Folder	Test Name	Description
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork	PTD_SF_DELETE_QUERY	
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_CAT	
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_DEF	
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_DEPLOY	
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_SRCH_INDEX	
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_SRCH_INDX_FULL	
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_TEST_PAGE1	
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_TEST_PAGE_SEC	
<input type="checkbox"/>	IPTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_TST_PAGE	

To generate the report:

1. Select one or more tests in the Select Test(s) to Matrix Report grid to use for the report.

Use the Folder and Search for Tests By fields along with the Search button to filter the list of tests that are available to select for the report:

- Select a value in the Folder list to specify the PTF Explorer Tree level to include. To include tests from all folders, leave this field blank.
- To include only tests that match a test name or description, select *Name* or *Desc* from the Search for Tests By list, then enter the search string in the adjacent edit box.
- To include only tests within a specified Application Designer project, select a Project.

Click Search to populate the Select Test(s) to Matrix Report grid with the tests that match the criteria specified.

2. Click Generate Report to create the report.

The following fields are on the Matrix Details Report page:

<b>Folder</b>	To limit the report to tests from a specific folder, select the level of the PTF Explorer Tree to include. To include tests from all folders, leave this field blank.
<b>Search for Tests By</b>	Select <i>Name</i> to search for reports by test name, or <i>Desc</i> to search for reports by their description.  Enter the Search string in the adjacent edit box. To retrieve all reports, leave the edit box blank.
<b>Project</b>	Select a project from the list to limit the report to tests from a specific Application Designer project.
<b>Search</b>	Click to populate the Select Test(s) for Test Coverage Report grid with the tests that match the criteria specified.
<b>Select All</b>	Click to select all tests that are listed in the Select Test(s) for Test Coverage Report grid.
<b>Clear All</b>	Click to deselect all tests that are listed in the Select Test(s) for Test Coverage Report grid.
<b>Generate Report</b>	Click to create the report.

### Image: Matrix Details Report Example

This example illustrates the generated Matrix Details report.

Personalize   Find   View All     First 1-12 of 12 Last						
	Test Parent Folder	Test Name	Test Type	Top Parent	Selected Test	Child Test
1	PTQA\TESTSCRIPTS\SES_SearchFrameWork	PTD_SF_DELETE_QUERY	Shell Test	X		
2	PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_SRCH_INDEX	Test		X	X
3	PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_SRCH_IND_X_FULL	Test		X	X
4	PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_DEF	Test			X
5	PTQA\FLAJAX_Gen	PTD_SF AJAX_SELECT_LOOKUP_ITEM	Library			X
6	PTQA\FLAJAX_Gen	PTD_SF_FRAMESET	Library			X
7	PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_TST_PAGE	Test			X
8	PTQA\FL\SES	PTD_SF_DEL_QRY_SEARCH	Library			X
9	PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_TEST_PAGE_SEC	Test			X
10	PeopleTools Development\Search Framework	PTD_SF_PRCS_WT_FR_DIST_ST	Library			X
11	PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_CAT	Test			X
12	PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_DEPLOY	Test			X

[Return](#)

## Querying PTF Report Tables

You can query these tables using PS Query to produce your own maintenance and coverage reports:

- PSPTTSTMAINTRPT

This PTF table contains the data that is used to create the Test Maintenance report.

- PSPTTSTCOVRGRPT

This PTF table contains the data that is used to create the Test Coverage report.



## Chapter 8

# Incorporating Best Practices

---

## Incorporating PTF Best Practices

This section discusses how to incorporate these PTF best practices:

- Keep your desktop simple.
- Adopt naming conventions.
- Record first.
- Document tests.
- Clean up tests.
- Use configuration and execution options.
- Use page prompting.
- Use the Process step type.
- Make tests dynamic.

### Keep your Desktop Simple

Close all programs other than PTF and the PeopleSoft application browser during recording and execution of PTF tests. Other applications – especially those that alert the user with spontaneous notifications, such as email and instant messaging programs – can interfere with PTF and the PeopleSoft application browser and thus cause unexpected results during record and playback.

### Adopt Naming Conventions

You should understand these PTF test asset naming limitations:

- Test names and test case names must be unique.

Tests and test case are PeopleTools managed objects, a very important type of PeopleSoft metadata. As a result, test names must be unique to a database and test case names must be unique to a test.

- Test and test case names are limited to letters, numbers, and underscore characters.

The first character of any test or test case name must be a letter.

- Test and test case names are limited to 30 characters.

You will find it easier to manage test assets if you adopt a systematic naming convention that reflects important characteristics of the tests and test cases you create. Here are a few suggested test characteristics that you can incorporate in your PTF test names:

- Functionality being tested.

Include a brief indication of the functional area or business process validated by the test.

- Priority. A short code, such as “P1,” to indicate priority can help testers more easily locate the tests that are critical or likely to be run most often.
- Execution order.

PTF Explorer sorts tests alphabetically within each folder. It is sometimes useful to view tests in order of intended execution, especially if some tests depend on other tests having been run previously in the same database. Include a numeric component early in the name of the test to make alphabetic order equal to execution order.

It may seem simpler to use folders to categorize tests by the above characteristics. However, folder names are often not visible to the tester and do not appear on some PTF reports, such as the Test Maintenance Report. So, regardless of whether you categorize tests by folder, it is helpful to build test characteristics into the names of your tests.

The following three test names are examples of a naming convention that reflects functionality, priority, and intended execution order:

- WRKFRC\_P1\_01\_HIRE\_REQD\_FLDS
- WRKFRC\_P1\_02\_PERSON\_CHNG 21
- WRKFRC\_P1\_03\_JOB\_DATA\_UPDAT

## Record First

A critical best practice when automating with PTF is to record first, and record whenever possible, to drive as much information, including PeopleTools metadata, into the recorded test as possible.

You must assertively record every test step from the test. That is, even if the input fields are already set to the expected value, you must explicitly set or verify that value when recording. The recorder only captures actions that you take against objects during record time. If you skip an object during recording because it is already set to the desired value, the test will ignore it and fail if the default value of the same object is different during execution.

When you record a date field that includes a calendar object that enables the user to select a date, it is best to explicitly enter the date value in the edit box.

You may need to perform two actions instead of one. For instance, if the test instructions say to select a check box but the check box is already selected, then you will need to pause the recording, deselect the check box, restart the recording, and then select the check box. Alternatively, you could click the check box twice and then delete the extra step from your test.

If you need to add a new step to a test, select the spot in the test where the new step will occur and record the step at the insertion point. Recording a step is more likely to drive accurate information into your test than trying to construct the entire step by editing the fields through the Test Editor.

## Related Links

[Recording Tests](#)

## Document Tests

Make it part of your automation routine to take advantage of the description fields in PTF tests and test cases as often as possible. PTF test and test case names tend to be short and abstract, so longer descriptions will help you and future testers understand the functional purpose of available PTF tests and test data.

You can find description fields in:

- Test description.
- Test properties.
- Test case description.
- Test case properties.
- Step information.

Use the Log actions to make your tests self-documenting. For instance, you can add a Log.Message before a Test.Exec step to describe the test you are calling, and you can put a Log.Message in the called test to document what the test does.

You can add comments in RTF format to the test, test case, and steps to document your tests. Comments can include application snapshots.

## Clean Up Tests

Immediately after recording a test, review the recorded test data in the Test Editor and correct actions taken inadvertently during recording, such as:

- Unnecessary or extra clicks on a clickable item, such as a check box.
- Clicks on the wrong objects, such as links and images.
- Incorrect text entered into text boxes.

Revise the recorded values in the Value field (for editable fields) and delete unneeded steps.

This might be a good time to evaluate whether you should incorporate reserved words and variables to replace static values that may be different when the test is executed.

## Related Links

[Make Tests Dynamic](#)

## Use Configuration and Execution Options

Employ configuration options and execution options to take login information out of the test whenever appropriate. Suppose you have the following manual test step:

1. Log into your database as a user with the PeopleSoft User role.

Coding user-specific information into many tests may make future updates difficult if user IDs in the test environment are changed.

The following example shows how to make a recorded test easier to maintain by setting configuration options to use `Browser.Start_Login` (it automatically inactivates the sequence of steps that records logging in (Steps 2 through 4) and replaces those steps with the single action, `Browser.Start_Login`) and using execution options for the user ID and password at the login page:

### Image: Example of using `Browser.Start_Login`

This example illustrates inactivating the sequence of steps that record logging in (Steps 2 through 4) and replacing those steps with the single action, `Browser.Start_Login`, which takes the user ID and password from the execution options and enters them at the login page:

Seq	ID	Comment	Active	Scroll ID	Type	Action	Recognition	Parameters	Value
1			<input checked="" type="checkbox"/>		Browser	Start_Login			
2			<input type="checkbox"/>		Text	Set_Value	Name=userid		PTDOOCL
3			<input type="checkbox"/>		Pwd	Set_Value	Name=pwd		1ENC29CDD008E830562C4010DE2C487016EC80509EEC
4			<input type="checkbox"/>		Button	Click	Name=Submit		
5			<input checked="" type="checkbox"/>		Link	Click	id=pfhnavbca_PORTAL_ROOT_OBJECT		
6			<input checked="" type="checkbox"/>		Link	Click	Name=fdra_MANAGE_ASSETSIndex=0		
7			<input checked="" type="checkbox"/>		Link	Click	id=fdra_MANAGE_ASSETS1		
8			<input checked="" type="checkbox"/>		Link	Click	id=fdra_USE3111		
9			<input checked="" type="checkbox"/>		Link	Click	innerText=Enter Allocation Basis		
*			<input checked="" type="checkbox"/>						

### Related Links

[Defining PTF Configuration Options](#)

[Configuring Execution Options in PTF Client](#)

[Start\\_Login](#)

## Use Page Prompting

Use of PTF page prompting steps make tests more robust and repeatable by simplifying test data and replacing it with intelligence built into the step.

Page prompting functions replace explicit navigation in the test and instead directly access the component search page by URL manipulation. A test with the navigation explicitly defined can break when the navigation changes, even though the application is working fine. Page prompting avoids this problem.

Tests that use page prompting are more repeatable. Consider the following test instruction:

1. At the Define Calculation search page, add a calculation with the name KUSPTEST or, if it already exists, update it.

Using page prompting, a single step can navigate directly to the search page and either update or add a key, whichever is needed.

PTF can be configured to insert page prompt constructs automatically during recording. The default behavior is set by the PTF administrator on the Define Configuration Options page and can be overridden during recording using the recorder utility tools.



See the Page type actions Prompt and PromptOK for more details.

## Related Links

[Prompt](#)

[PromptOK](#)

[Using the PTF Test Recorder](#)

[Defining Configuration Options](#)

## Use the Process Step Type

The Process step type with a Run action is useful for running processes through Process Scheduler.

When you select the *Use Process Run* check box before you record a process request all actions in the run request standard page will be replaced by the step action Process.Run and any Process Monitor actions that are recorded will be ignored.

You can set the *Use Process Run* check box using PeopleSoft Internet Architecture (select PeopleTools, Lifecycle Tools, Test Framework, Define Configuration Options) for all tests, or you can select the check box from the Toolbar when you are ready to record a test (Configure Recording Settings icon).

The Process.Run step will handle the execution and return the process status. You can modify the parameters on the Process.Run step to indicate the expected results.

Suppose you have the following test scenario:

From the Request Calculation page, click the Process Monitor link.  
In Process Monitor, click the Refresh button until either Success or Error appears in the Run Status column for your process instance.

The Process.Run step will capture all of the process information and you can modify the step parameters in PTF.

## Related Links

[Process](#)

## Make Tests Dynamic

Many tests involve values and conditions that are not known until a test runs. Advanced functionality in PTF enables you to build tests that adapt to the application when necessary.

These test scenarios show examples of how to exploit the dynamic test features of PTF:

- Variables

Requirement: A test that creates an entry in the application with a system-generated ID number and later has to verify that same ID number elsewhere in the application.

Solution: Store the system-generated ID to a variable in one step, and then reference that variable to verify the value in another step.

- Conditional logic

Requirement: A test that specifies that the user click an icon to expand a section of a page, but only if that section is not already expanded.

Solution: Place the step in an If\_Then construct that evaluates whether the section is expanded.

- Scroll handling

Requirement: A test that updates an item in a grid regardless of the position of the item in the grid.

Solution: Use a Scroll action to identify the row by key rather than by position.

- Reserved words

Requirement: A test that instructs the user to enter the date the test is executed into the application.

Solution: Use the #TODAY reserved word to enter the current date.

Dynamic steps improve the reusability and maintainability of tests.

As you are recording, be sure to make a note of situations that require dynamic handling so you can take advantage of the appropriate dynamic construct that will ensure that the test will work at execution time.

## Related Links

[Using Variables](#)

[Using Conditional Logic](#)

[Incorporating Scroll Handling](#)

[Using Reserved Words](#)

## Reduce Duplication

Avoid creating tests and test steps that are duplicated elsewhere. When multiple tests validate similar functionality, it increases the complexity of test maintenance and the amount of manual work necessary to add or change test functionality later.

Follow these recommendations to help keep test duplication to a minimum:

- Drive similar tests into test cases.

Do this any time multiple tests have the same logic and where the only difference among the tests is the data entered or validated. A test to hire two employees or to create ten new vouchers would be a good candidate for taking advantage of test cases.

- Isolate sequences of test steps into called tests or libraries whenever the steps are identical.

A procedure that verifies or sets the same setting on an installation table would be a good candidate for putting into a library if multiple products or tests modify the same setting.

## Related Links

[Creating Test Cases](#)

[Calling Tests](#)

## Chapter 9

# Using the PTF Test Language

## Understanding the PTF Test Structure

A PTF test is composed of a series of steps. This example shows the steps in a simple test.

### Image: Example of a PTF test

This example illustrates the fields and controls for a simple PTF test. You can find definitions for the fields and controls later on this page.

Seq	ID	Comment	Active	Scroll ID	Type	Action	Recognition	Field Label	Value
1	1		<input checked="" type="checkbox"/>		Browser	Start_Login			
2	8		<input checked="" type="checkbox"/>		Browser	FrameSet	TargetContent		
3	10		<input checked="" type="checkbox"/>		Page	Prompt	MAINTAIN_SECURITY.USER_SAVEAS.GBL		update
4	11		<input checked="" type="checkbox"/>		Text	Set_Value	Name=PSQPRDEFN_SRCH_OPRID		QEDMO
5	18		<input type="checkbox"/>		Log	Message	This step will not execute		
6	12		<input checked="" type="checkbox"/>		Page	PromptOk			
7	13		<input checked="" type="checkbox"/>		Text	Set_Value	Name=DERIVED_CLONE_OPRID	New User ID	JGDMO
8	14		<input checked="" type="checkbox"/>		Text	Set_Value	Name=DERIVED_CLONE_OPRDEFNDESC	Description	Jim's ID
9	15		<input checked="" type="checkbox"/>		Pwd	Set_Value	Name=DERIVED_CLONE_OPERPSWD	New Password	1ENCF39A6DEC0870C5BB7257A...
10	16		<input checked="" type="checkbox"/>		Pwd	Set_Value	Name=DERIVED_CLONE_OPERPSWDCONF	Confirm Password	1ENCF39A6DEC0870C5BB7257A...
11	17		<input checked="" type="checkbox"/>		Page	Save			
▶*			<input checked="" type="checkbox"/>						

Each step in a test is composed of the following fields:

### Seq (sequence)

A system-generated sequence number. Test steps execute according to the Seq order. When you copy, move, add, or delete a step, Seq is refreshed.

### ID

A system-generated unique identifier for each step, in a test. The ID value does not change when you move, add, or delete a step.

Test maintenance reports use the ID value.

### Comment

Click in this field to add a comment for the step.

### Active

Deselect this field to inactivate a step. PTF skips inactive steps when executing the test. This field is grayed for inactive steps.

### Scroll ID

This field is required only for scroll handling.

### Type

The type of application object to take an action on or to validate. Common step types are Text, Checkbox, Browser, and so on.

### Action

The action the test is to take on the object. The two most common actions used on a Text object, for example, would be Set\_Value and Verify.

**Recognition**

The means that PTF uses to identify the object within the application. Commonly, this is the HTML ID property.

**Parameters**

The conditions that apply to this specific step, if applicable.

---

**Note:** This field was introduced in release 8.54; in previous releases, parameters were specified as part of the Recognition field. When you save a test from release 8.53 or lower, PTF automatically moves any parameters from the Recognition field to the Parameters field.

---

**Field Label**

Contains the label text of the page control referenced in the Recognition field.

The value for the Show Field Label option in the Local Options dialog box determines whether this column appears:

- If Column is selected, the Field Label column appears.
- If Tooltip is selected, the column does not appear; instead, the field label appears in a tooltip when you position the mouse cursor over the Value field.

For more information about setting local options, see [Configuring Local Options](#).

**Value**

In a typical recorded step, this is the value the tester entered for an object.

In a step recorded in verify mode, this would be the value that was present in the object when it was verified.

As a rule, a test has a single step for each instruction in a manual test case. For example, consider the following manual test instruction:

12. Enter the value "KU0001" into the text box labeled "Employee ID".

This test instruction could be represented in PTF as a step, as shown in this example:

**Image: Example of a PTF test step**

This example illustrates the step to enter a value in an edit box.

Seq	ID	Comment	Active	Scroll ID	Type	Action	Recognition	Parameters	Value
1	2		<input checked="" type="checkbox"/>		Text	Set_Value	Name=EMPLID		KU0001

The PTF test language syntax and vocabulary are designed to read like a technical version of English. As a result, the function of most steps should be apparent from their construction and the context of surrounding steps.

For a detailed reference of PTF step types and actions, see [PTF Test Language](#)

## PTF Test Language

This section discusses:

- Validation.
- Parameters.
- Variables.
- Reserved words.
- System variables.
- Syntax check.
- Context sensitive help within grid for function parameter details.

### Validation

Each step type allows only certain actions. Similarly, each action can only be used with certain step types.

The PTF Test Editor automatically limits your choice of actions based on the step type selected.

For example, if a step has the Type field set to *Text* and the Action field set to *Set\_Value*, you can change the Action field to *Verify* since it is included in the list of available values for a text object.

This example shows a drop-down list with *Verify* as one of the values for the Action field when the Type field is set to *Text*:

#### Image: Action Drop-Down List for Text

This example illustrates the drop-down list showing available actions for the step type:Text.

Text	▼	Set_Value	▼
Link	▼	Exists	
		GetLabel	
Link	▼	Get_Property	
		Set_Value	
Link	▼	Verify	

### Parameters

Typically, you place parameters in the Parameters field and use the following structure:

```
param=value;
```

Separate parameters with a semi-colon.

For example:

```
prcname=RCOM01; wait=true;
```

With a Radio object, you can also place parameters in the Value field.

See [Radio](#).

Steps that return a value require the parameter `ret=&variable;`

For example:

```
ret=&chart_val;
```

The system ignores unneeded parameters. For example, `Browser.Start` and `Browser.Start_Login` do not take any parameters, so the system ignores any values in the Recognition field for `Browser.Start` or `Browser.Start_Login`.

## Prompting

The PTF Test Editor provides context sensitive help for recognition and parameters. Double-click in the Recognition column or Parameters column to view the help and enter the corresponding values.

For examples see [Context Sensitive Help within Grid for Function Parameter Details](#)

## Variables

Variables enable you to work with steps in which the information or values are not known when you create the test or the information or values for a step change each time the test executes.

You prefix variables with an ampersand (&).

In this example, the first step stores the value in the `userid` field to the variable `&USERID`. The second step populates the `pwd` field with the value in the variable `&USERID`.

### Image: Example of Using Variables in Test Steps

This example illustrates how variables can be used in test steps.

Type	Action	Recognition	Parameters	Value
Text	Get_Property	Name=userid	ret=&USERID	
Pwd	Set_Value	Name=pwd		&USERID

System variables are predefined variables that PTF populates at runtime. For instance, `%test%` is populated with the test name at runtime.

## Related Links

[Variable](#)

[Using Variables](#)

[System Variables](#)

## Reserved Words

Similar to variables, you use reserved words to supply information that is not known until a test executes.

Prefix reserved words with a pound sign (#) and use them in the Value field of a test to verify a condition, change the value in an application field, or both. In this example, the *#TODAY* reserved word sets the EFFDT\_FROM field to the current date.

**Image: Example of using the #TODAY reserved word**

This example illustrates how the reserved word *#TODAY* can be used in a test step.

Type	Action	Recognition	Parameters	Value
Test	Set_Value	Name=EFFDT_FROM		#TODAY

## Related Links

[Using Reserved Words](#)

[Reserved Words](#)

## System Variables

System variables are predefined variables that PTF populates at runtime. System variables provide data about the current environment, execution options, test, and application.

Because system variables are replaced with a text string at runtime, you can place a system variable wherever you would place a text string. Commonly, test developers assign a system value to a user-defined variable.

The following example shows two methods of assigning system variables to user-defined variables:

**Image: Example of using system variables**

This example illustrates 2 methods for assigning system variables to user-defined variables.

Variable	Set_Value	&User	%eo.dbuser%
Variable	Set_Value	&Test=%test%	

## Related Links

[System Variables](#)

## Syntax Check

If the syntax or value in a test step is not correct, the test will produce an error when the test is executed. The Check Syntax option allows a user to validate the parameters provided in their steps either on save or on demand prior to execution.

Check Syntax will:

- Display an error message for any invalid or missing required parameter values.
- Display a error message for any invalid optional parameter values.
- Display a warning message when the return value of a step has not been entered.
- Display an error window listing all errors and warnings found in sequential order for a test.

---

**Note:** There may be multiple errors in a single step.

---

- Display an error when syntax is incorrect or missing, such as verifying that all Conditional.If steps are paired with Conditional.End\_if steps.

---

**Note:** Check syntax validates only active steps. Only syntax is validated, not data.

---

Check Syntax does not validate:

- PTF functions.
- System variables.
- Reserved words.
- Condition sign.
- File and folder names.
- Duplicated parameters.
- Missing values.
- Parameter that is not available for the action.
- Missing parameter name.

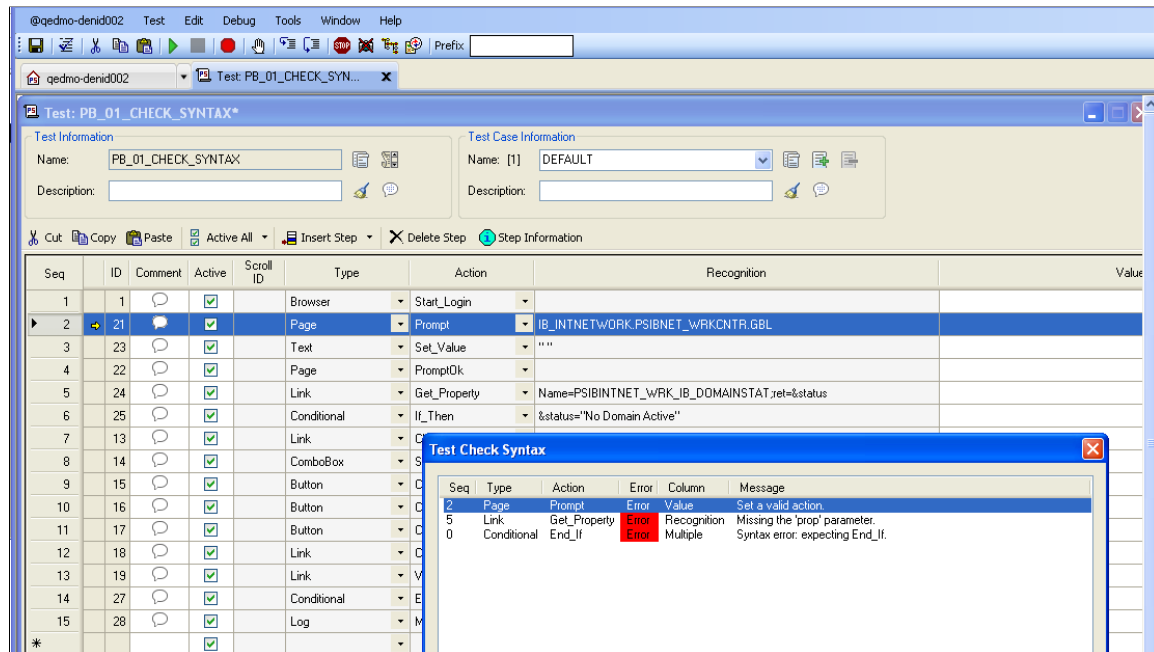


## Running On Demand Syntax Check

After you have edited your test, select Test, Check Syntax or click the Check Syntax icon. The errors and warnings will be displayed. When you click on the error or warning in the Test Check Syntax window, the step is highlighted in the test.

### Image: Test Syntax Check Showing 2 Errors

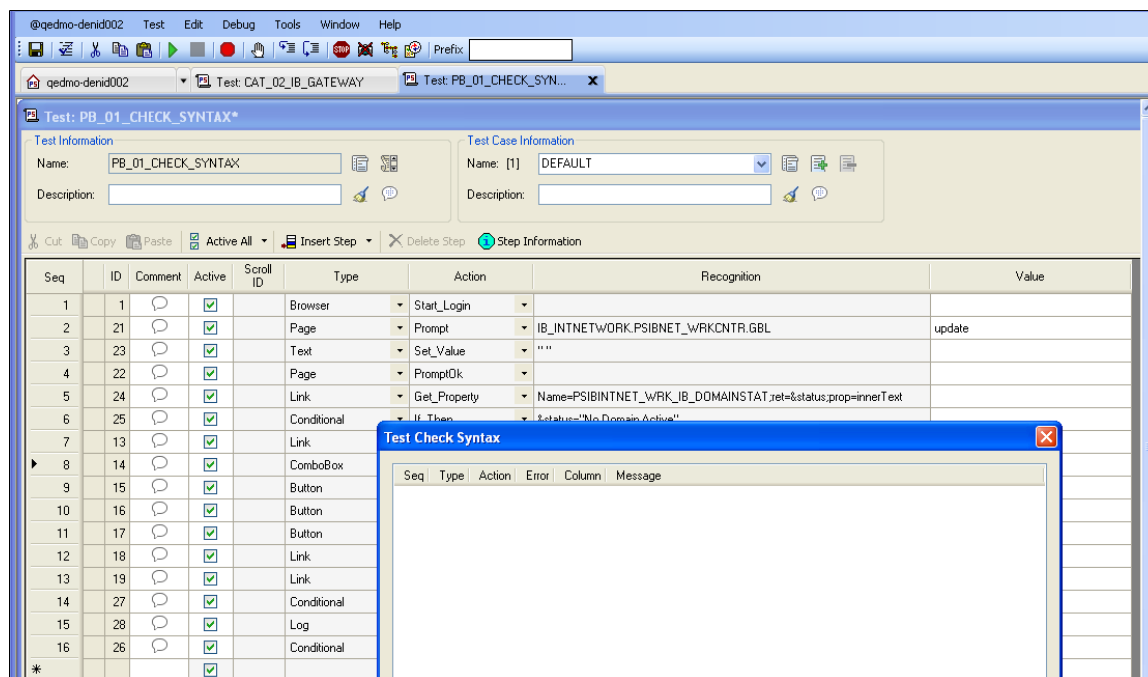
This example illustrates the check syntax dialog box with 2 errors.



If the syntax check does not detect any errors or warning, the dialog box will not return any rows of data:

### Image: Test Syntax Check Showing No Errors or Warnings

This example illustrates the check syntax dialog box with no errors.



### Automatically Running Syntax Check on Save

To have Syntax Check run automatically every time you save a test:

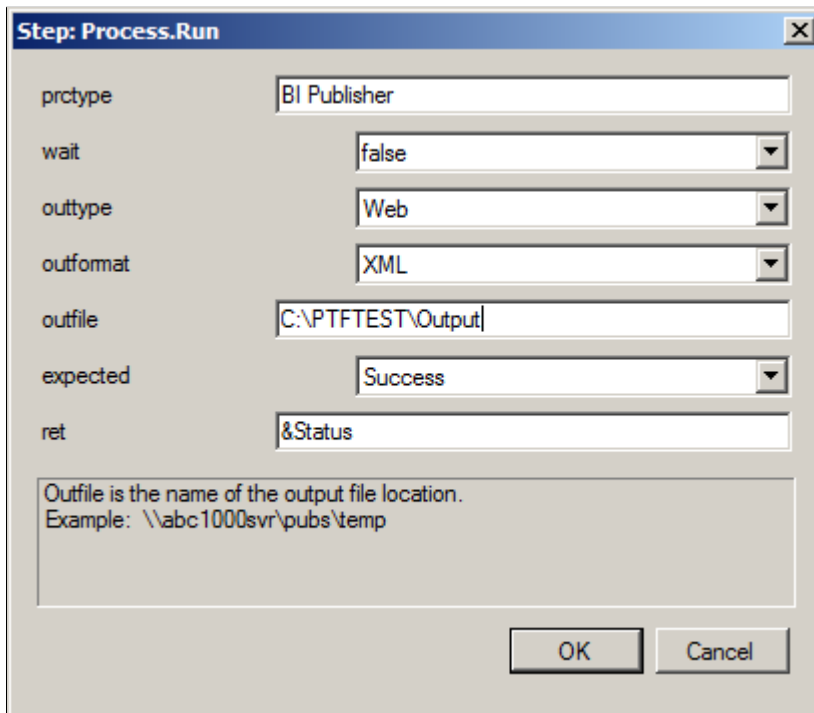
1. In PTF Explorer, click on your environment name and select Local Options.
2. In the Auto-Check Syntax field select *Yes* and click OK.
3. When you save a test, you will be prompted to run the syntax check.

## Context Sensitive Help within Grid for Function Parameter Details

For any step type/action that includes parameters, you can double-click in the Parameters column to display and enter the parameters. For each parameter, an explanation and example are displayed. This is an example of the step Process.Run:

### Image: Parameter Dialog Box for Step:Process.Run

This example illustrates the fields and controls on the Parameter dialog box for Step:Process.Run. You can find definitions for the fields and controls later on this page.



The image shows a dialog box titled "Step: Process.Run" with a close button (X) in the top right corner. The dialog box contains several parameters, each with a label and a corresponding input field or dropdown menu:

- prctype**: A text input field containing "BI Publisher".
- wait**: A dropdown menu with "false" selected.
- outtype**: A dropdown menu with "Web" selected.
- outformat**: A dropdown menu with "XML" selected.
- outfile**: A text input field containing "C:\PTFTEST\Output".
- expected**: A dropdown menu with "Success" selected.
- ret**: A text input field containing "&Status".

Below the parameters, there is a text area containing the following text:

Outfile is the name of the output file location.  
Example: \\abc1000svr\pubs\temp

At the bottom right of the dialog box, there are two buttons: "OK" and "Cancel".

For some step types, for example Query, you can also double-click in the Value column to display and enter parameters.



# Test Language Reference

---

## Step Types

This section lists each of the PTF step types and defines the actions associated with the step type. The object types are listed in alphabetical order.

---

## Browser

These are the actions associated with the Browser step type.

### Close

#### Description

Closes the current browser (that is, the one with the execution focus).

### FrameSet

#### Description

Sets the focus in a browser frame.

Embedded frames include a number, such as `ptModFrame_1`. You can substitute `##` for the number, for example `ptModFrame_##` and PTF will search through all frames starting with `ptModFrame_` and use the one with the highest number.

### Set\_URL

#### Description

Sets the portal type. Uses the URL for the selected portal type defined in the execution option to access the component. This is the url that is used with `Page.Prompt`.

## Example

### Image: Example of Set\_URL action

This example illustrates the Set\_URL action.

Type	Action	Recognition	Value
Browser ▾	Start_Login ▾		
Browser ▾	Set_URL ▾	EMPLOYEE	

## Start

### Description

Starts the browser instance where the test will be executed. Uses the URL from the selected execution option.

## Start\_Login

### Description

Starts the browser instance where the test will be executed and logs into the PeopleSoft application. Uses the URL, user ID, password, and form factor from the selected execution option and the language selected in the test Language field.

## WaitForNew

### Description

Waits for a new browser to appear, then continues execution with the new browser.

Specify a timeout value in seconds in the Value column. The default is 10.

---

**Note:** Microsoft Internet Explorer must be set to open pop-ups in a new window for PTF to recognize new browser windows. To set this option, in Internet Explorer select Tools, Internet Options. Click the Tabs button, then select Always open pop-ups in a new window, then click OK.

---

## Button

These are the actions associated with the Button step type.

## Click

### Description

The description for this action is in the Common Actions section.

See [Click](#).

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## Get\_Property

### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

## Verify

### Description

The description for this action is in the Common Actions section.

See [Verify](#).

---

## Chart

These are the actions associated with the Chart step type.

## ChartGetType

### Description

Returns the chart type from a displayed chart on the PIA page.

### Parameters

<b>chart=</b> <i>value</i> ;	The index for the chart image on the page.
<b>ret=</b> <i>&amp;variable</i> ;	The return value.

## GetText

### Description

Returns the text value for the specified chart section.

## Parameters

<b>chart=</b> <i>value</i> ;	The index for the chart image on the page.
<b>idx=</b> <i>value</i> ; <b>url=</b> <i>value</i> ; <b>alt=</b> <i>value</i> ;	The section recognition string. It can be the section index, the section URL, or the alternative text.
<b>ret=</b> <i>&amp;variable</i> ;	The return value.

## Example

This is an example of the GetText action for a Chart step type:

### Image: Example of GetText action for a Chart step type

This example illustrates the GetText action for a Chart step type.

Type	Action	Recognition	Parameters	Value
Chart	GetText	chart=0	ret=&chart_val.idx=3	
Log	Message	The value for index 3 is &chart_val		
Chart	GetText	chart=0	ret=&chart_val.idx=2	
Log	Message	The value for index 2 is &chart_val		

## SectionCount

### Description

Counts the number of regions in a chart.

### Parameters

<b>chart=</b> <i>value</i>	The index for the chart image on the page.
<b>ret=</b> <i>&amp;variable</i>	The return value.
The Chart.SectionCount returns the real value (not zero-based). If you are using this variable in combination with zero-based indexes, such as a For loop, you may need to subtract 1.	



## Example

This is an example of the SectionCount action for a Chart step type:

### Image: Example of SectionCount Action for a Chart Step Type

This example illustrates using the SectionCount action with a loop to retrieve the text for each section.

Type	Action	Recognition	Parameters	Value
Browser	Start_Login			
Browser	FrameSet	TargetContent		
Page	Prompt	QE_CHART_MENU.QE_CHART2.GBL		update
Text	Set_Value	Name=QE_CHART_RECORD_QE_CHART_CATEGORY		CAR SALES
Page	PromptOk			
Chart	SectionCount	chart=0	ret=&chart_count	
Log	Message	ChartCount => &chart_count		
Loop	For	&var=0 to Subtract(&chart_count! 1)		
Chart	GetText	chart=0	idx=&varret=&chart_value	
Log	Message	ChartValue => &chart_value		
Loop	Next			

## CheckBox

These are the actions associated with the CheckBox step type.

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## Get\_Property

### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

## GetLabel

### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## Set\_Value

### Description

The description for this action is in the Common Actions section.

See [Set\\_Value](#).

## Verify

### Description

The description for this action is in the Common Actions section.

See [Verify](#).

---

## ComboBox

These are the actions associated with the ComboBox step type.

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## Get\_Property

### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

## GetLabel

### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## Set\_Value

### Description

Sets the field value in the ComboBox to the value specified in Value.

You can also use this action with the #LIST# reserved word to verify whether items exist in the list.

When used with #LIST#, Set\_Value returns an error if the expected value (the bracketed value) is not the same as the actual value.

## Example

This example sets the field value to French and verifies that the values English, French, and Finnish exist in the list.

### Image: Example of using the Set\_Value action with the #LIST# reserved word

This example illustrates setting the field value to French and verifies that the values English, French, and Finnish exist in the list

Type	Action	Recognition	Parameters	Value
ComboBox	Set_Value	Name=PSOPRDEFN_LANGUAGE_CD		#LISTEnglish(French)Finnish

## Related Links

[#LIST#](#)

## Verify

### Description

Compares the value in the browser to the expected value and adds a Pass or Fail log entry for the validation. Use a vertical pipe (|) to separate values to be verified. Use square brackets ([]) to specify which value is expected to be selected.

### Example

This example verifies that the field value is set to Two and verifies that the values One and Three exist:

### Image: Example of Verify action

This example illustrates the step to verify that the field value is set to Two and that the values One and Three exist.

ComboBox	Verify	Name=DUMMY_FIELD	One[Two]Three
----------	--------	------------------	---------------

## Command

Use the Command step to run a command line program. The command step has one associated action Exec.

## Exec

### Description

Executes a command line program.

## Parameters

**name=&commandname**

The command name as defined on the Define Configuration Options page.

See [Defining Configuration Options](#).

**timeout=&seconds**

The number of seconds before the program times out.

**ret=&variable**

The return value.

## Example

This is an example of a command line program that requires multiple parameters.

**Image: Example of Command.Exec with Parameters Defined in the Value Column**

This example illustrates a command line program that requires multiple parameters.

Command	Exec	name=TEXT_COMP;ret=&return	WORDVP c:\temp\base.txt c:\temp\actual.txt c:\temp\comparison.doc
---------	------	----------------------------	---

## Example

If the command line program is used in multiple tests, you should create a library test for the command. This example shows a test library created for the FILEKILL command. The command has one parameter FILENAME.

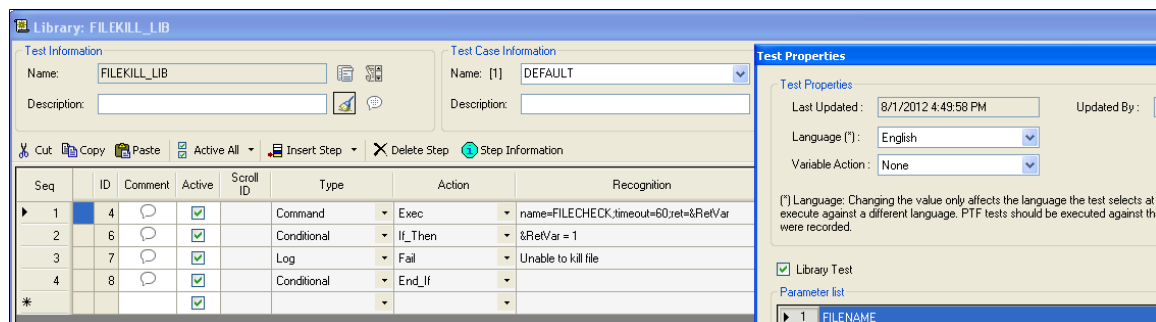
---

**Note:** FILEKILL and FILECHECK commands are examples of possible utilities to call from PTF, they are not delivered with PTF. Customers are responsible for creating their own command line programs.

---

**Image: Example Command in a Library Test**

This example illustrates the FILEKILL command.exec step, it has one parameter FILENAME. This command will look for a specific file and delete it if it exists. If the file cannot be deleted it returns a 1.



This is an example of the calling test.

### Image: Example of the Calling Test

This example illustrates how the command can be called from a test. This test will delete the file before running a process to create a new file.

Type	Action	Recognition	Value
Browser	Start_Login		
Variable	Set_Value	&filename	c:\Labs\files\menu.pdf
Test	Exec	FILEKILL_LIB;FILENAME= &filename	DEFAULT
Browser	FrameSet	TargetContent	
Page	Prompt	PROCESS_SCHEDULER.PRCSMULTI.GBL	add update
Text	Set_Value	Name=PRCSRUNCNTL_RUN_CNTL_ID	test
Page	PromptOk		
Process	Run	prcname=<RfW\IN.prctype=BI Publisher,outtype=File,outformat=PDF,outfile=&filename	
Test	Exec	FILECHECK_LIB;FILENAME=&filename	DEFAULT

## Conditional

You can control the flow of execution of tests using conditional constructs. A conditional construct begins with an If\_Then action and ends with an End\_If action. You can optionally include an Else action.

Conditional constructs can be nested.

These are the actions associated with the Conditional step type.

### Else

#### Description

(Optional) If the logical expression evaluates to False, the system executes the steps between the Else step and the End\_If step.

### End\_If

#### Description

The close statement of the If\_Then construct.

### If\_Then

#### Description

The first step in a conditional construct. The system evaluates the logical expression in the Recognition field of the If\_Then step. If the expression evaluates to True, the system executes the steps between the If\_Then step and the End\_If step or the Else step, if it exists. If the expression evaluates to False, the system jumps to the Else step, if it exists, or to the End\_If step if there is no Else, and continues execution.

If\_Then supports these logical operators:

<>, >=, <=, >, <, =

You can use the AND and OR logical operators to specify multiple conditions.

## Example

This example shows the use of multiple conditions and nested conditionals:

### Image: Example of the If\_Then conditional construct

This example illustrates the use of multiple conditions and nested conditionals.

Variable	▼	Set_Value	▼	&Integer	3
Conditional	▼	If_Then	▼	&Integer>=1 AND &Integer<=10 OR &Integer=0	
Log	▼	Message	▼	Determine whether Integer is odd or even	
Log	▼	Message	▼	Enter first nested conditional	
Conditional	▼	If_Then	▼	&Integer = 0	
Log	▼	Message	▼	Do not divide by 0.	
Conditional	▼	Else	▼		
Variable	▼	Set_Value	▼	&Half=Divide(&Integer 2 dec=1)	
Log	▼	Message	▼	Enter second nested conditional	
Variable	▼	Set_Value	▼	&Odd=Substr(&Half 3)	
Conditional	▼	If_Then	▼	&Odd = 5	
Log	▼	Message	▼	The number is odd	
Conditional	▼	Else	▼		
Log	▼	Message	▼	The number is even	
Conditional	▼	End_If	▼		
Conditional	▼	End_If	▼		
Conditional	▼	End_If	▼		

## DataMover

This is the action associated with the DataMover step type.

## Exec

### Description

Executes a DataMover script. The output folder will be the one selected for the PeopleSoft Data Mover output folder. If the output path is not set in the execution options, it uses the system temp folder.

## Example

This example shows the use of the Exec action:

### Image: Example of the DataMover Exec action

This example illustrates the use of the Data Mover.Exec action

Type	Action	Recognition	Parameters	Value
DataMover	Exec			C:\temp\emp_imp.dms

---

## Div

These are the actions associated with the Div step type:

## Click

### Description

The description for this action is in the Common Actions section.

See [Click](#).

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## Get Property

### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

---

## Execution

Use the Execution actions in shell tests to modify the behavior of tests during execution. You typically set these options as you are developing tests to facilitate the development process.

The Execution step type is available only in shell tests.

## Set\_Options

### Description

Override the default execution option. Specify the name of a valid execution option in the Recognition column.

## Skip\_PageSave

### Description

Specify *True* or *False* in the Recognition column. Specify True to skip Page.Save steps. You would, for instance, select this option to avoid creating duplicate values if you plan to run a test repeatedly.

This action overrides the Skip PageSave setting in Execution Options.

## Skip\_RunRequest

### Description

Specify *True* or *False* in the Recognition column. Specify True to skip Process.Run steps. Specify False to execute the Process.Run steps.

This action overrides the Skip RunRequest setting in Execution Options.

## Skip\_Login

### Description

Specify *True* or *False* in the Recognition column. Specify True to skip Browser.Start\_Login steps. Specify False to execute Browser.Start\_Login steps.

## StopOnError

### Description

Specify *True*, *False* or *ALL* in the Recognition column.

Specify True to stop execution on the current called Test when a Fail is logged.

Specify False to continue execution when the called test encounters a Fail.

Specify ALL to stop shelltest execution when any called test encounters a Fail.

This action overrides the Stop on Error setting in Test Editor.

### Related Links

[Configuring Execution Options in PTF Client](#)



## File

The File step type corresponds to the object in PIA that allows users to upload and download files to the PeopleSoft application.

These are the actions associated with the File step type.

## Download

### Description

Used to download a file.

The File.Download step needs to be preceded by the appropriate click (such as Image.Click, Link.Click, or Button.Click). In the Value column specify a full file path name.

Select the File Download Prompt check box in the Settings dialog box to be prompted for a file download path when recording the test.

To set the file download prompt check box:

1. Click the Show Test Recorder icon.
2. Click the Configure recording settings icon.
3. Select File Download Prompt check box and click OK.
4. Record your test and you will be prompted for the file download path when you record a download step.

### Example

These examples show the use of File.Download.

#### Image: Example of File Download action for downloading to Excel

This example illustrates the File Download action for downloading a Query to Excel

Type	Action	Recognition	Parameters	Value
Link	Click	Name=QRYRUNEXCEL\$0		
File	Download			C:\Temp\excel_test.xls

#### Image: Example of File Download action from a button

This example illustrates the File Download action from a button.

Type	Action	Recognition	Parameters	Value
Button	Click	Name=FILE_ATTACH_WRK_ATTACHDET		
File	Download			c:\Temp\test1.txt

## Upload

### Description

Uploads a file.

In the Recognition column specify the string to get the object from the page. In the Value column specify a full file path name.

### Example

This example shows the use of the Upload action:

#### Image: Example of the File Upload action

This example illustrates the File.Upload step.

File	▼	Upload	▼	name=#OrigFileName	C:\Temp\MyFile.txt
------	---	--------	---	--------------------	--------------------

## HTMLTable

These are the actions associated with the HTMLTable step type.

### CellClick

#### Description

Clicks on a specific HTMLTable cell based on the index parameter.

#### Parameters

**index=I/R/C:** The table, row, column index string.

For example:

`index=&CellIndex`

`index=1/2/3 ;`

In the second example, CellClick clicks on the third column of the second row of the first table.

### CellClickOnChkB

#### Description

Clicks the check box specified in the table cell location based on the index parameter.

## Parameters

**index=I/R/C:**

The table, row, column index string.

For example:

```
index=&CellIndex
```

```
index=1/2/3;
```

In the second example, this function clicks on a checkbox within the third column of the second row of the first table.

**chkidx=value;**

The CheckBox object index inside the cell.

**check=value;**

check=Y – Select the checkbox.

check=N – Clear the checkbox.

This parameter is optional. The default value is Y.

## CellClickOnImage

### Description

Clicks the image specified in the table cell location based on the index parameter.

### Parameters

**index=I/R/C:**

The table, row, column index string.

For example:

```
index=&CellIndex
```

```
index=1/2/3;
```

In the second example, this function clicks on an image within the third column of the second row of the first table.

**name=value;**

The HTMLImage's NameProp value.

## CellClickOnLink

### Description

Clicks the link specified in the table cell location based on the index parameter.

### Parameters

**index=I/R/C:**

The table, row, column index string.

For example:

```
index=&CellIndex
```

```
index=1/2/3;
```

In the second example, this function clicks on a link within the third column of the second row of the first table.

**link=***value*;

The link text value.

## CellExists

### Description

Determines whether a cell exists.

### Parameters

**index=***I/R/C*:

The table, row, column index string.

For example:

```
index=&CellIndex
```

```
index=1/2/3;
```

In the second example, this function verifies whether a cell exists within the third column of the second row of the first table.

**ret=***&variable*

The return value.

True – the cell exists.

False – the cell does not exist.

## CellGetIndex

### Description

Searches the page for the text value specified in the text parameter and returns the index string for the first cell that contains the text. The index string is in the form of *I/R/C*, where *I* is the table index, *R* is the row number, and *C* is the column number. Other actions, such as `CellClick`, `CellGetValue`, and so on, use an index string to reference a specific cell.

Use the `GetCellIndex` button on the recorder toolbar to capture the text value and return a variable for the index.

### Parameters

**text=***value*;

The text to look for on the page.

**index=value;**

Optional. If a value is entered it is used to start the search for the text. If the value is blank, PTF will start to look for the text in the index 1/1/1.

**equal=value;**

`equal=true` performs an exact match on the text to search for. This is the default for this optional parameter.

`equal=false` uses a LIKE statement when performing the search.

**ret=&variable**

The return value is an index string in the form of I/R/C, where I is the table index, R is the row number, and C is the column number.

For example:

```
ret=&CellIndex
```

## Example

This is an example of several of the HTMLTable actions:

### Image: Example of CellGetIndex action

This example illustrates using the CellGetIndex to return a variable for the index, then create a variable for the html cell that is to the left of the original cell using the sum function. In this example PTF will start to look for the text in table 7, row 1, column 1.

Type	Action	Recognition	Parameters	Value
Browser	Start_Login			
Browser	FrameSet			
Link	Click	id=pttabpercontent		
Browser	FrameSet	PtModFrame_###		
HTMLTable	CellGetIndex	text=BI Publisher	index=7/1/1;equal=true;ret=&htmlIndex	
Variable	Set_Value	&htmlIndex		sum(&htmlIndex;-1 3 "/")
HTMLTable	CellClick	index=&htmlIndex		
Page	Save	Name=PORTAL_HPWRK_HTMLAREA		

## CellGetValue

### Description

Returns the contents of an HTMLTableCell.

Use the CellGetValue button on the recorder toolbar to capture the index value and return a variable for the value.

### Parameters

**index=I/R/C:**

The table, row, column index string.

For example:

```
index=&CellIndex
```

```
index=1/2/3;
```

In the second example, this function returns the contents of the third column of the second row of the first table.

**ret=&variable**

The return value.

## ColCount

### Description

Returns the number of columns for the HTMLTable row.

### Parameters

**table=***value*;

The table index.

**row=***value*;

The row index.

**index=***I/R/C*:

An index string in the form of I/R/C, where I is the table index, R is the row number, and C is the column number.

As an alternative to specifying the table and row parameters, you can specify an index string, such as the return value from a CellGetIndex action.

For example:

```
index=&CellIndex;
```

**ret=&variable**

The return value.

## RowCount

### Description

Returns the number of rows for the HTMLTable.

### Parameters

**table=***value*;

The table index.

**index=***I/R/C*:

An index string in the form of I/R/C, where I is the table index, R is the row number, and C is the column number.

As an alternative to specifying the table parameter, you can specify an index string, such as the return value from a CellGetIndex action.

For example:

```
index=&CellIndex;
```

**ret=&variable**

The return value.

## Image

These are the actions associated with the Image step type.

### Click

#### Description

The description for this action is in the Common Actions section.

See [Click](#).

### Exists

#### Description

The description for this action is in the Common Actions section.

See [Exists](#).

### Get\_Property

#### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

### RightClick

#### Description

Performs a right-click on the image. This action is supported only for a related-content image glyph.

---

## Link

These are the actions associated with the Link step type.

### Click

#### Description

The description for this action is in the Common Actions section.

See [Click](#).

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## Get\_Property

### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

## SaveTargetAs

### Description

Provides the ability to do a right-click and then save as on a link. Enter the link name in the recognition column and the file path in the value column.

### Example

#### Image: Example of SaveTargetAs action

This example illustrates saving a report to a target location. From the View Log/Trace page (PMN\_CDM\_INDEX) in the Process Monitor, click on the report name, verify it is the correct report and then do a SaveTargetAs to save the report to a file location.

Type	Action	Recognition	Parameters	Value
Link	Click	Name=PMN_DERIVED_INDEX_BTN		
Link	Verify	Name=URL\$0		DDDAUDIT_532.PDF
Link	SaveTargetAs	Name=URL\$0		C:\TEMP\DDDAUDIT.PDF

## Verify

### Description

The description for this action is in the Common Actions section.

See [Verify](#).

## Log

Use the Message, Pass, Warning, and Fail log actions to write entries to the execution log.

Text specified in the Recognition field is written to the log and is displayed as a line in the tree view and in the Message field in the Details pane. Text in the Value field is written to the log and is displayed in the Details field in the Details pane when the corresponding line is selected in the tree view.



Use the Snapshot action to capture a screen image.

These are the actions to add entries to the execution log.

## Fail

### Description

Logs an entry with a status of Fail.

## Message

### Description

Logs a message with a status of Info.

---

**Note:** A message is not written to the log if the Verbose field is set to *False* in execution options.

---

## Pass

### Description

Logs an entry with a status of Pass.

## Snapshot

### Description

Logs an entry with an image of the current screen.

## Warning

### Description

Logs an entry with a status of Warning.

### Example

This example shows how the Log actions log text:

#### Image: Example of Log action steps

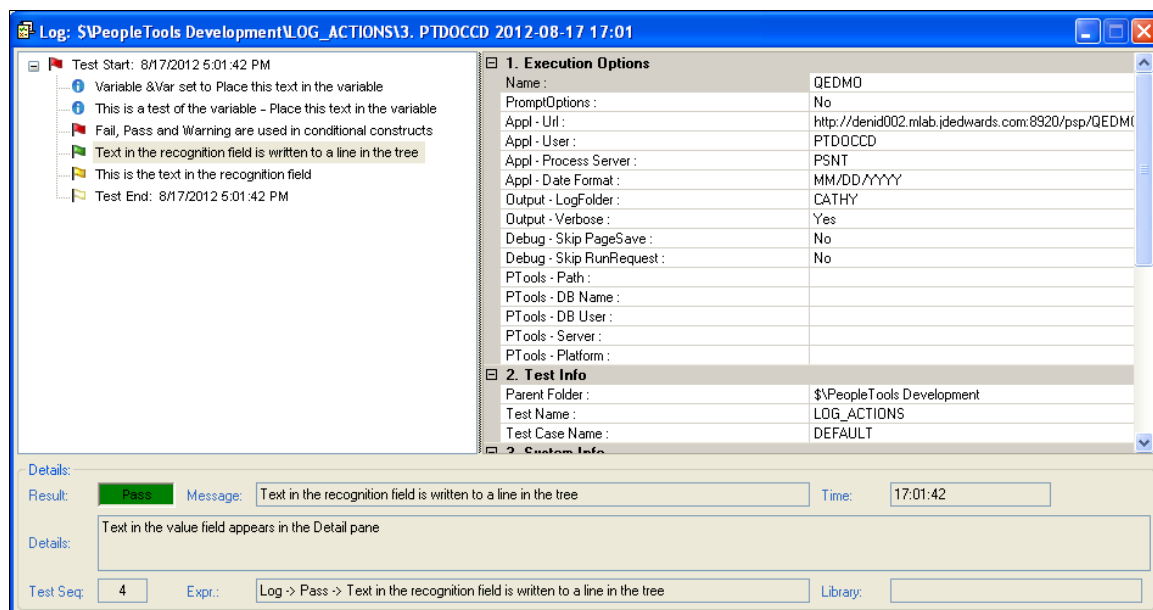
This example illustrates Log actions for Fail, Pass and Warning.

Type	Action	Recognition	Parameters	Value
Variable	Set_Value	&Var		Place this text in the variable
Log	Message	This is the text of the variable - &Var		
Log	Fail	Fail, Pass, and Warning are used in conditional constructs		
Log	Pass	Text in the Recognition field is written to a line in the tree		Text in the Value field appears in the Details pane
Log	Warning	This text is in the Recognition field		This text is in the Value field
Log	Snapshot	Double-click to view the image		

This log example shows how text from the Log actions appears in the Log Viewer:

### Image: Example of a PTF log

This example illustrates the PTF log generated when the above test is executed.



## LongText

These are the actions associated with the LongText step type.

### Exists

#### Description

The description for this action is in the Common Actions section.

See [Exists](#).

### Get\_Property

#### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

### GetLabel

#### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## Set\_Value

### Description

The description for this action is in the Common Actions section.

See [Set\\_Value](#).

## SetValue\_InModal

### Description

Use the SetValue\_InModal action to set the value of a long text field on a modal page.

## Verify

### Description

The description for this action is in the Common Actions section.

See [Verify](#).

---

## Loop

These are the actions associated with the Loop step type.

## Do

### Description

Executes the steps between the Loop.Do step and the Loop.End\_Loop until a Loop.Exit\_Loop step is encountered.

## Example

### Image: Example of a Loop.Do construct

This example illustrates a Loop.Do construct.

Variable	▼	Set_Value	▼	&Var = 0	
Loop	▼	Do	▼		
Log	▼	Message	▼	The variable is &Var	
Conditional	▼	If_Then	▼	&Var > 3	
Loop	▼	Exit_Loop	▼		
Conditional	▼	End_If	▼		
Loop	▼	End_Loop	▼		

## End\_Loop

### Description

Terminates a Loop.Do or Loop.While construct.

## Exit\_Loop

### Description

Exits a Loop.For or Loop.While construct. Execution continues with the step following the End\_Loop step. Typically, a Loop.Exit\_Loop step is placed within a conditional construct.

## While

### Description

Executes the steps between the Loop.While step and the Loop.End\_Loop while the expression in the Recognition field evaluates to True.

When the expression evaluates to false, flow skips to the step following the End\_Loop step.

## Example

### Image: Example of Loop.While

This example illustrates a Loop.While construct.

Variable	▼	Set_Value	▼	&Var = 0	
Loop	▼	While	▼	&Var <= 3	
Log	▼	Message	▼	The variable is &Var	
Variable	▼	Set_Value	▼	&Var = add(&Var;1)	
Loop	▼	End_Loop	▼		

## For

### Syntax

*&variable=begin\_value to end\_value;*

### Description

Executes the steps between the Loop.For step and the Loop.Next step until the expression in the Recognition field evaluates to False, then flow skips to the step following the Loop.Next step.

### Parameters

<b>&amp;variable</b>	The variable to be used in the comparison. This variable is incremented in the Loop.Next step.
<i>begin_value</i>	The starting value.
<i>end_value</i>	The ending value.

## Next

### Description

Terminates a Loop.For construct. Loop.Next increments the variable in the Loop.For step.

See [Add](#).

### Example

#### Image: Example of a Loop.For Construct

This example illustrates using the Loop For with Loop Next to terminate the loop.

Variable	▼	Set_Value	▼	&Var = 0	
Loop	▼	For	▼	&Var; =1 to 5	
Log	▼	Message	▼	The variable is &Var	
Loop	▼	Next	▼		

## MsgBox

Use the MsgBox step to insert manual steps in your test for steps that cannot be automated in PTF. For example, if your test includes a step to drag and drop on a page, you will not be able to automate the drag and drop feature. By using the MsgBox step, the message will be displayed allowing the user to perform the action manually, once the user dismisses the message box PTF execution will continue.

All of the actions associated with MsgBox step type use the same parameters.

## Actions for MsgBox Step Type

The following actions are associated with the MsgBox step type, all of the actions use the same parameters.

<b>Action</b>	<b>Description</b>
AbortIgnoreRetry	Creates a message box that contains 3 buttons- Abort, Ignore, and Retry.
OKCancel	Creates a message box that contains 2 buttons- OK and Cancel.
OKOnly	Creates a message box that contains 1 button- OK.
RetryCancel	Creates a message box that contains 2 buttons- Retry and Cancel.
YesNo	Creates a message box that contains 2 buttons- Yes and No.
YesNoCancel	Creates a message box that contains 3 buttons- Yes, No, and Cancel.

### Parameters

***prompt=*value**

The text string displayed in the message dialog box.

To include a line break within a text string, use `<NL>`. For example:

```
prompt=Newline Message Prompt!!  
<NL>Line1<NL>Line2<NL>Line3
```

Creates the following text string:

```
Newline Message Prompt!!  
Line1  
Line2  
Line3
```

***title=*value**

The text string displayed in the title bar of the message dialog box.

***ret=&MyBtnClick***

The variable name that will store the integer indicating which button the user clicked.

### Return Values

The return value is based on the button that was pressed by the user during test execution:

<b>Button Pressed</b>	<b>Return Value</b>
OK	1

<b>Button Pressed</b>	<b>Return Value</b>
Cancel	2
Abort	3
Retry	4
Ignore	5
Yes	6
No	7

## Example

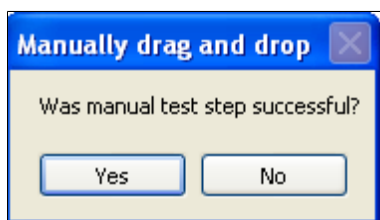
### Image: Example of MsgBox Steps

In this example variables are created to store the text for the prompt and title. The message box is created as a YesNo message box. If the Yes button is pressed by the user, the return value will be 6.

Variable	Set_Value	&TestStep	Manually drag and drop
Variable	Set_Value	&Prompt	Was manual test step successful?
MsgBox	YesNo	prompt=&Prompt;title=&TestStep;ret=&ret	
Conditional	If_Then	&ret=6	
Log	Pass	Manual Step &TestStep Passed	
Conditional	Else		
Log	Message	Manual Step &TestStep Failed	
Conditional	End_If		

### Image: Example of the Message Box displayed in test execution

Based on the test steps in the example above, the message box is created.



## MultiSelect

MultiSelect allows you to select multiple values. The values are separated by a pipe (|). These are the actions associated with the MultiSelect step type.

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## Get\_Property

### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

## GetLabel

### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## Set\_Value

### Description

The description for this action is in the Common Actions section.

See [Set\\_Value](#).

## Verify

### Description

The description for this action is in the Common Actions section.

See [Verify](#).



## MultiSelect Example

This is an example of using MultiSelect on the Portal Layout page. In this example, you select 3 values in the first column (col0))and move them to the second column (col1), then verify the values.

### Image: Example of MultiSelect Steps

This example illustrates using MultiSelect with Set\_Value to indicate the multiple values and then move the values to a new column, the verify the values in the new column.

Type	Action	Recognition	Value
Browser	Start_Login		
Browser	FrameSet		
Link	Click	id=pttabperlayout	
Browser	FrameSet	ptModFrame_###	
MultiSelect	Set_Value	Name=col0	Calculator Calendar Dictionary
Image	Click	Name=moverightimg	
MultiSelect	Verify	Name=col1	Dictionary Calendar Calculator
Page	Save	Name=PORTAL_HPWRK_HTMLAREA\$17\$	

## Page

These are the actions associated with the Page step type.

## Expand

### Description

Attempts to expand all the collapsed sections on the current page.

## Go\_To

### Description

Accesses a page by selecting a page tab. Enter the page name in the Recognition field.

### Example

#### Image: Example of the Go\_To action

This example illustrates the Go\_To action for a page step.

Page	Go_To	Roles	
------	-------	-------	--

## Prompt

### Description

Opens a component based on the *MENU.COMPONENT.MARKET* recognition string.

If the component has a search page, use the Page.PromptOk action to close the search page.

In the Value field, you must provide an action. The valid values are:

- add
- add update
- add correct
- update
- update all
- correction

## PromptOK

### Description

Closes the search page. If the specified action is update, this action selects the first returned value.

### Example

#### Image: Example of the Prompt and PromptOK actions

This example illustrates the use of the Prompt and PromptOK actions.

Page	▼	Prompt	▼	SQA_MENU.SQA_SIMPLECOMP.GBL	add update
Text	▼	Set_Value	▼	name=SQA_SIMPLEREC_SQA_DATAID	US001
Page	▼	PromptOk	▼		

## Save

### Description

Attempts to save the current page. This action checks for the SkipSavePage flag in the execution options. For non-standard pages, the non-standard save object is recorded in the recognition column.

### Example

#### Image: Non-Standard Page Save Step

This example illustrates a non-standard page save where the non-standard save object is defined in the recognition field.

Page	▼	Save	▼	Name=PORTAL_HPWRK_HTMLAREA	
------	---	------	---	----------------------------	--

# SecPage\_Close

## Description

Closes the secondary page.

# SecPage\_Open

## Description

Opens a secondary page.

## Parameters

**page= *value*** Specify the name of the secondary page.

## Example

### Image: Example SecPage\_Open

This example illustrates the SecPage\_Open action.

Type	Action	Recognition	Parameters	Value
Page	SecPage_Open	Name=SQA_SIMPLEREC	Page=SQA_SIMPLESUBPAGE	

---

# Process

The Process actions run processes through Process Scheduler.

# Run

## Description

Runs a Process Scheduler process.

## Parameters

**prcname= *value*;** The process name.

**prctype= *value*;** The process type.

**wait= *value*;** True - the test waits for the process to finish.  
False - the test does not wait for the process to finish.  
The default is False.

**outtype= *value*;** The process output type.

**outformat= *value*;** The process output format.

**outfile=***value*;

The process output file.

**expected=***value*;

Defines the expected status for the process when it completes.

Expected status is based on status values returned in the Run Status column in Process Monitor.

For example:

`expected=Success;``expected=No Success;`

If the final status equals the expected status, then a Pass is logged; if not, a Fail is logged.

**ret=***&variable*

The return value.

True - the process completed successfully.

False - the process did not complete successfully.

## Example

### Image: Example of Run Action

This example illustrates an example of the run action, followed by a conditional If\_Then to verify that the process ran to success.

Type	Action	Recognition	Parameters	Value
Browser	Start_Login			
Browser	FrameSet	TargetContent		
Page	Prompt	APPMMSGMONITOR.RUN_APPMSGARCH.GBL		add update
Text	Set_Value	Name=PRCSRUNCNTL_RUN_CNTL_ID		archive
Page	PromptOk			
CheckBox	Set_Value	Name=IB_ARCH_RUNCNTL_IB_STATUS_CANCEL		Y
Process	Run	prcname=APPMMSGARCH	prctype=Application Engine.outtype=Web.outformat=TXT.expected=Success.ret=&status	
Log	Message	status is &status		
Conditional	If_Then	&status = True		
Log	Message	Worked		
Conditional	End_if			

## Run\_Def

### Description

Changes the default behavior of the run process. Insert these steps prior to the Process Run step that they modify. This action only supports one parameter per step. For multiple parameters, you will need multiple steps.

### Parameters

**RunButton=***value*;

The run button name.

**ProcessMonitorLink=***value*;

The Process Monitor link name.

**ProcessInstanceField=***value*;

The field where the process instance ID will appear.

<b>QueuedTimeout=</b> <i>value</i> ;	Overwrites the local option value (in minutes).
<b>PostingTimeout=</b> <i>value</i> ;	Overwrites the local option value (in minutes).
<b>ProcessingTimeout=</b> <i>value</i> ;	Overwrites the local option value (in minutes).
<b>ExceptionTimeout=</b> <i>value</i> ;	General timeout, in minutes, for all the states that are not in the local option.
<b>QueuedResult=</b> <i>value</i> ;	Overwrites the local option value. Valid values are <i>FAIL</i> and <i>WARN</i> .
<b>PostingResult=</b> <i>value</i> ;	Overwrites the local option value. Valid values are <i>FAIL</i> and <i>WARN</i> .

## Related Links

[Configuring Local Options](#)

---

## Pwd

These are the actions associated with the Pwd step type.

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## GetLabel

### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## Set\_Value

### Description

The description for this action is in the Common Actions section.

See [Set\\_Value](#).

## Query

This is the action associated with the Query step type.

### Exec

#### Description

Runs a public query in PeopleSoft Query and downloads the results. To run a private query, use the Exec\_Private action.

---

**Note:** Context sensitive help is available by double-clicking in the Value column to display and enter the query parameters.

---

#### Parameters

<b>outFile=</b> <i>value</i> ;	The query output file.
<b>outFolder=</b> <i>value</i> ;	The folder where the result will be saved. If this parameter is missing, the system will use the value in the local option.
<b>outFormat=</b> <i>value</i> ;	The file format that will be used to download the result file. If this parameter is missing, the system will use the value in the local option.
<b>param=</b> <i>value</i> ;	The list of comma delimited values for all the query parameters.
<b>0rows=</b> <i>value</i> ;	If the query returns zero rows, add a log entry of type value. Valid values are Pass, Fail, or Warning.
<b>Nrows=</b> <i>value</i> ;	If the query returns one or more rows, add a log entry of type value. Valid values are Pass, Fail, or Warning.

### Exec\_Private

#### Description

Runs a private query in PeopleSoft Query and downloads the results.

#### Parameters

<b>outFile=</b> <i>value</i> ;	The query output file.
<b>outFolder=</b> <i>value</i> ;	The folder where the result will be saved. If this parameter is missing, the system will use the value in the local option.
<b>outFormat=</b> <i>value</i> ;	The file format that will be used to download the result file. If this parameter is missing, the system will use the value in the local option.

<b>param=value;</b>	The list of comma delimited values for all the query parameters.
<b>0rows=value;</b>	If the query returns zero rows, add a log entry of type value. Valid values are Pass, Fail, or Warning.
<b>Nrows=value;</b>	If the query returns one or more rows, add a log entry of type value. Valid values are Pass, Fail, or Warning.

---

**Note:** Query steps do not support simultaneous usage of both 0rows= and Nrows= parameters in the same step.

---

Use the following formats to specify query parameters:

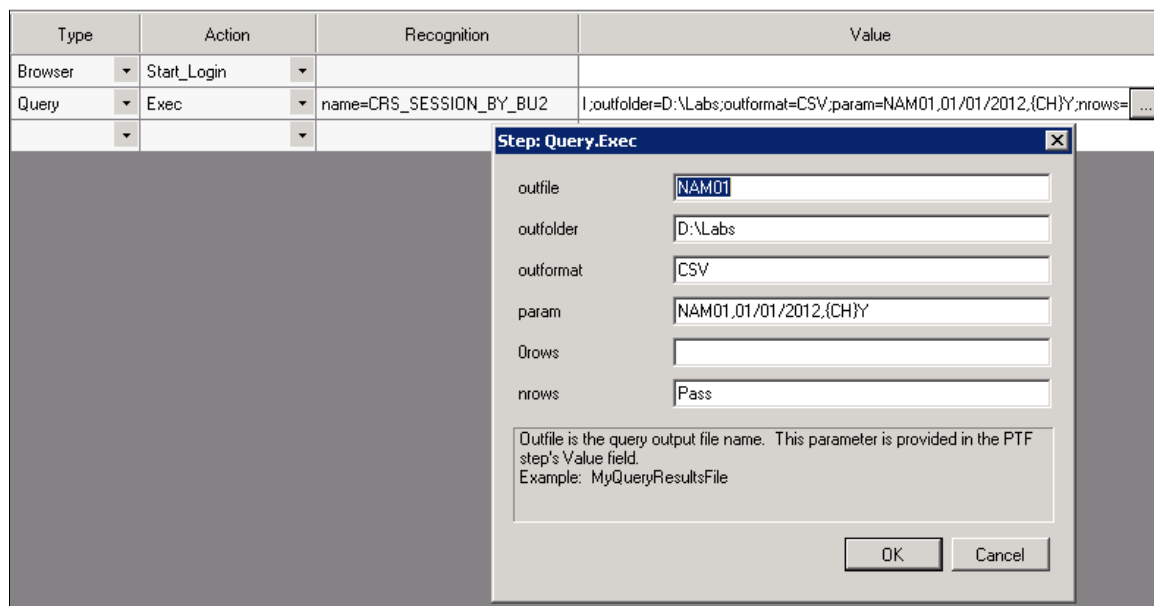
<b>Page Control</b>	<b>Format</b>
Text	param=value
Radio button	param={RB}value
Combo box	param={CB}value
Check box	param={CH}value
Text box	param={EB}value

## Example

This example shows the Query.Exec step type, with the dialog box for the values open. In this example, the query has 3 prompts: a text field, a date field and a check box. The query is expected to return rows.

### Image: Example of Query.Exec Action

This example illustrates entering the value parameters for the Query.Exec action.



## Radio

These are the actions associated with the Radio step type.

### Exists

#### Description

The value property is required to validate whether a radio button exists on the page. It can be defined in the Recognition field using `value=value` or in the Value field.

See [Exists](#).

#### Example

In the following example, in the first step the value property is set in the Value field. In the second step, the value is set in the Parameters field using the `Value=` parameter.

#### Image: Example of setting the value for a Radio step type

This example illustrates setting the value for a Radio step type.

Type	Action	Recognition	Parameters	Value
Radio	Exists	Name=SQA_SIMPLEREC_SQAOPTION	ret=!RadioEx1	2
Radio	Exists	Name=SQA_SIMPLEREC_SQAOPTION	ret=!RadioEx2; value = 3	

## Get\_Property

#### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

## GetLabel

#### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## Set\_Value

#### Description

The description for this action is in the Common Actions section.

See [Set\\_Value](#).



## Verify

### Description

The description for this action is in the Common Actions section.

See [Verify](#).

---

## RichText

These are the actions associated with the RichText step type.

## GetLabel

### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## Set\_Value

### Description

The description for this action is in the Common Actions section.

See [Set\\_Value](#).

---

## Scroll

These are the actions associated with the Scroll step type.

The Scroll ID field is required for all Scroll action types.

### Related Links

[Incorporating Scroll Handling](#)

## Action

### Description

Takes an action based on the row specified by Key\_Set.

## Parameters

**ret=&variable;**

The return value. It returns the position index for the field acted upon, based on the row identified using Key\_Set.

Specify the action in the Value column.

This table lists the valid values for the Action action.

<b>Value</b>	<b>Description</b>
ins	Insert a row. If the current row is the first row, then use the existing row.
ins+	Always insert a row.
delins	Delete all rows, and then insert into the first row.
del	Delete the row specified by the Key_Set action.
delall	Delete all rows. No further processing.
delsel	Look for the row and delete it. Do not add a fail if the row does not exist.
upd	Find a specified row to work with. If the row is not found, insert a new row or use the first row for the first time.
upd+	Find a specified row to work with. If the row is not found, always insert a new row.
sel	Find a row specified by the Key_Set action.
find	Use the scroll Find link. Format: find= <i>text_to_find</i>
not	Check that the row is not in the scroll. Add a Fail to the log if the row is found.

## Definition

### Description

Use the Definition action to override the default name object of scroll buttons and the scroll parent. This is necessary, for example, when a page uses custom objects (such as links or pushbuttons) to handle conventional scroll actions such as adding or deleting rows from the scroll.

### Parameters

**def=value;**

One of the definition values. Example:

```
def=parent;
```

**type=***value*;

The following table gives valid values for the def parameter.

The step type for the new action.

Example 1:

```
type=Image;
```

Example 2:

```
type=PushButton;
```

**value=***value*;

The scroll parent variable or the new object recognition string.

Example 1:

```
value=&Scr1;
```

Example 2:

```
value=Name=$ICField3$newm$0$$img$0;
```

**start=***value*

Used to set the scroll area index when the index is not \$0 .

In this example the index will start the scroll index at \$1.

```
def=START;Value=1
```

**skipvalidation=***value*

Used to skip the validation if the defined scroll has 1 or multiple rows in the scroll when the user deletes or adds a row to it.

PTF handles scroll validation assuming the new row is added to the bottom of the scroll area. There are many cases where the row is added as the top row which will cause the PTF internal scroll validation to fail after the row is inserted. Use the SKIPVALIDATION to handle this situation.

Example 1:

This example will skip the validation when a single row is inserted or deleted from the scroll area.

```
def=SKIPVALIDATION;type=SINGLE_ROW
```

Example 2:

This example will skip the validation if multiple rows have been inserted or deleted from the scroll area.

```
def=SKIPVALIDATION;type=MULTIPLE_ROW
```

This table lists the valid values for the def parameter:

<b>Value</b>	<b>Description</b>
ADD	Override the Add new row button.
DEL	Override the Delete row button.

<b>Value</b>	<b>Description</b>
NEXT	Override the Next button.
PREV	Override the Previous button.
FIRST	Override the First button.
LAST	Override the Last button.
PARENT	Reassign the parent for a specific scroll area.

## Examples

This example uses the Definition action with the `def=Add` parameter to assign the Add action to the image `$ICField3$newm$0$$msg$0`:

### Image: Example of a Definition action with `def=Add` parameter

This example illustrates using the Definition action with `def=Add` parameter.

Type	Action	Recognition	Parameters	Value
Scroll	Definition	value=Name=\$ICField3\$newm\$0\$\$msg\$0	def=ADD.type=Image	

In this example the Definition action with a `def=parent` parameter reassigns the parent:

### Image: Example of the Definition action with the `def=parent` parameter

This example illustrates using the Definition action with the `def=parent` parameter

Scroll ID	Type	Action	Recognition	Parameters	Value
1	Scroll	Key_Set	Name=PSU_EMP_REVIEW_REVIEW_YEAR	type=Text	2009
1	Scroll	Action		ret=&Scr1	upd
	Text	Set_Value	Name=PSU_EMP_REVIEW_REVIEW_DAYS&Scr1	Scroll1 index variable = &Scroll1	365
2	Scroll	Definition	value=&Scr1	def=PARENT	
2	Scroll	Key_Set	Name=PSU_EMP_RVW_RVR_REVIEWER_ID	Type=ComboBox	00013
2	Scroll	Action		ret=&Scr2	upd
	ComboBox	Set_Value	Name=PSU_EMP_RVW_RVR_REVIEWER_TYPE&Scr2		S

## Key\_Set

### Description

Defines each key field of a scroll. Use multiple `Key_Set` steps for scrolls with multiple key fields.

Specify the step type and field name as parameters. Specify the key value in the Value column.

### Parameters

**type=value;**

The step type for the key field.

Example:

```
type=Text;
```

**name=value;**

The name of the key field.

## Example

### Image: Example of the Key\_Set and Action actions

This example illustrates using Key\_Set and Action

Type	Action	Recognition	Parameters	Value
Scroll	Key_Set	Name=PSC_SCR_REC01_PSE_KEY_LVL1	type=Text	ROW1
Scroll	Action		ret=&Scr1	upd
Text	Verify	Name=PSC_SCR_REC01_PSE_KEY_LVL&Scr1		ROW1
ComboBox	Set_Value	Name=PSC_SCR_REC01_PSE_COMBO&Scr1	type=Text	second
Text	Set_Value	Name=PSC_SCR_REC01_CON_CHAR_01&Scr1		updated

## ModalGrid\_Close

### Description

Closes a modal grid.

## ModalGrid\_Open

### Description

Opens a modal grid.

## Reset

### Description

Resets all the scroll variables and closes the scroll section in the log.

## RowCount

### Description

Returns the number of rows for the defined scroll.

## Example

### Image: Example of RowCount action

This example illustrates using the RowCount action to perform a loop.

Scroll ID	Type	Action	Recognition	Value
	Browser	Start_Login		
	Browser	FrameSet	TargetContent	
	Page	Prompt	MAINTAIN_SECURITY.USERMAINT.GBL	update
	Text	Set_Value	Name=PSOPRDEFN_SRCH_OPRID	TEST1
	Page	PromptOk		
	Page	Go_To	Roles	
1	Scroll	Key_Set	type=EditBox,name=PSROLEUSER_VW_ROLENAME	Dummy
1	Scroll	RowCount	ret=%count	
	Variable	Set_Value	&end_count	Add(&count -1)
	Loop	For	&row_count =0 to &end_count	
	Text	Get_Property	Name=PSROLEUSER_VW_ROLENAME\$&row_count;ret=%value;prop=Value	
	Log	Message	The role of row number &row_count is &value	
	Loop	Next		

## Span

These are the actions associated with the Span step type.

## Click

### Description

The description for this action is in the Common Actions section.

See [Click](#).

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## Get\_Property

### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

## GetLabel

### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## MouseOver

### Description

Fires the mouseover event to show a popup page. Enter the page name in the Recognition field.

See "Using Pop-up Pages" (PeopleTools 8.54: Application Designer Developer's Guide)

## MouseOverClose

### Description

Fires the mouseout event to close a popup page. Enter the page name in the Recognition field.

### Example

The following examples show how MouseOver and MouseOverClose can be used with popup pages.

To record a verification of a field value in a mouseover popup window:

1. From the recorder tool bar, click and drag the Target icon for the Verify action and hover over the field with a popup window.
2. Wait until the popup window appears.
3. Move the cursor to the field you want to check, then release the mouse button.
4. PTF Recorder generates the following steps:

#### Image: Example of MouseOver with Span.Verify

This example illustrates the recorded steps.

Browser	▼	Start	▼		
Span	▼	MouseOver	▼	id=QE_EMPLOYEE_EMPLID	en
Span	▼	Verify	▼	Comment=QE_EMPL2_DEPTID	22000
Span	▼	MouseOverClose	▼	id=QE_EMPLOYEE_EMPLID	

To record an action for an object inside a mouseover popup window:

1. Click and drag the Target icon for the Verify action and hover over the field with a popup window.
2. Wait until the popup window appears, then release the mouse button.
3. Perform the action you want to record, such as clicking a URL link.

4. PTF Recorder generates the following steps:

**Image: Example of MouseOver with Link.Click**

This example illustrates the recorded steps.

Browser	▼	WaitForNew	▼		
Span	▼	MouseOver	▼	id=QE_EMPLOYEE_EMPLID	
Link	▼	Click	▼	Name=QE_EMPL_PHOTO2_URL innerText=UR...	
Span	▼	MouseOverClose	▼	id=QE_EMPLOYEE_EMPLID	

**Related Links**

"Using Pop-up Pages" (PeopleTools 8.54: Application Designer Developer's Guide)

## Verify

**Description**

The description for this action is in the Common Actions section.

See [Verify](#).

**Example**

This step validates a Span object that contains informational text:

**Image: Example of the Span.Verify action**

This example illustrates a Span.Verify step.

Span	▼	Verify	▼	ClassName=PSTEXT	(Includes values assigned for types spec...
------	---	--------	---	------------------	---

## Test

This is the action associated with the Test step type.

## Exec

**Description**

Calls another test or library test.

Specify the child test name in the Recognition field and one or more test case names in the Value field, separated by commas.

You can also click in the Recognition field then click the ellipsis icon and select a test case to automatically populate the Recognition and Value fields with the test name and the test case name.



Test.Exec supports the use of parameters that enable you to pass dynamic values from a calling test to a library test.

Right-click the test name in the Recognition field and select Open Test to open the child test.

Use the #IGNORE reserved word in the Value field to skip the call to the child test for a given test case.

See [Using Parameters with Library Tests](#).

## Example

This test calls the test CHILD\_ONE with the CASE\_01 test case, then skips the call to CHILD\_TWO:

### Image: Example of the Test Exec action

This example illustrates a step that calls the test COPY\_USER\_PROFILE with the DEFAULT, CASE\_01, and CASE\_02 test cases, then skips the call to PROCESS.

Type	Action	Recognition	Value
Test	Exec	CHILD_ONE	CASE_01
Test	Exec	CHILD_TWO	#IGNORE

---

## Text

These are the actions associated with the Text step type.

## Exists

### Description

The description for this action is in the Common Actions section.

See [Exists](#).

## Get\_Property

### Description

The description for this action is in the Common Actions section.

See [Get\\_Property](#).

## GetLabel

### Description

The description for this action is in the Common Actions section.

See [GetLabel](#).

## Set\_Value

### Description

The description for this action is in the Common Actions section.

See [Set\\_Value](#).

## Verify

### Description

The description for this action is in the Common Actions section.

See [Verify](#).

## Variable

This is the action associated with the Variable step type.

## Set\_Value

### Description

Assigns a value to the given variable.

### Example

This example shows how to set a variable and how to use variables in other steps:

#### Image: Example of the Set\_Value action

This example illustrates a test case that sets a variable, which is then used in other steps.

Log	▼	Message	▼	This is a test of variables	
Variable	▼	Set_Value	▼	&Var1=This is the value for Var1	
Log	▼	Message	▼	The value in Var1 is '&Var1'	
Variable	▼	Set_Value	▼	&Var2	This is Var2
Log	▼	Message	▼	The value in Var2 is '&Var2'	
Variable	▼	Set_Value	▼	&Var3=&Var1	
Log	▼	Message	▼	Var3 is a clone of Var1. The value is &Var3	

### Related Links

[Variables](#)

## Wait

These are the actions associated with the Wait step type.

### For\_Seconds

#### Description

Specify in the Recognition field the number of seconds PTF will wait before proceeding to the next step.

### For\_Value

#### Description

Wait until the field contains the value specified in the Value field.

#### Parameters

<b>type=</b> <i>value</i>	Specify the object type, such as Text, Combobox, Link, and so on.
<b>timeout=</b> <i>value</i>	[Optional] Specify the time out value, in seconds. The default is 300 seconds.
<b>refresh=</b> <i>value</i>	[Optional] Specify the refresh button name. If the refresh= parameter is specified, PTF waits five seconds between each validation process and the refresh click.

#### Example

This example shows the use of Wait:

#### Image: Example of the Wait actions

This example illustrates various uses of Wait.

Type	Action	Recognition	Parameters	Value
Wait	For_Seconds	60		
Wait	For_Value	STATUS	type=Link	
Wait	For_Value	STATUS	type=Link;Refresh=Name=RA_REFRESH_BTN;timeout=90	

## Common Actions

The actions in this section can be used with multiple step types. The step types that support the action are listed with each action.

## Click

### Description

Performs a mouse click on the specified object.

This is the list of objects that support this action:

- Button

See [Button](#).

- Image

See [Image](#).

- Link

See [Link](#).

- Span

See [Span](#).

### Example

This example shows the use of the Click action with a Button object and a Link object:

#### Image: Example of the Click action

This example illustrates the use of the Click action with a Button object and a Link object:

Button	▼	Click	▼	Name=PB_FILTER	
Link	▼	Click	▼	Name=LAST_NAME\$0	

## Exists

### Description

Checks whether the object exists on the page.

This is the list of objects that support this action:

- Button

See [Button](#).

- CheckBox

See [CheckBox](#).

- ComboBox

See [ComboBox](#).

- Image

See [Image](#).

- Link

See [Link](#).

- LongText

See [LongText](#).

- MultiSelect

See [MultiSelect](#).

- Pwd

See [Pwd](#).

- Radio

Refer to the Radio step type entry for details.

See [Radio](#).

- Span

See [Span](#).

- Text

See [Text](#).

## Parameters

**ret=&variable;**

ret=true – the object exists

ret=false – the object does not exist

**expected=value**

Specify expected=true or expected=false. Logs a Pass or Fail based on whether the ret parameter matches the expected parameter.

## Example

This example shows the use of the Exists action:

### Image: Example of the Exists action

This example illustrates the Exists action.

Text	Exists	name=USERID;ret&exists	
------	--------	------------------------	--

## Get\_Property

### Description

Gets the property value of an HTML object based on the `prop=value` parameter and assigns it to the variable in `ret=&variable`.

Use the HTML Browser feature of the Message tool to identify the properties and values of an object.

See [Using the Message Tool](#).

Some objects have properties that are different from what you might expect.

For example:

- The value property for a check box returns Y for selected, N for deselected.
- Combo boxes return the translate value of the selection for the value property.  
The full text of the selected item is available as the text property.
- Radio buttons return the translate value of the selection for the value property.
- The label of the selected item is a separate label object.

This is the list of objects that support this action:

- Button  
See [Button](#).
- CheckBox  
See [CheckBox](#).
- ComboBox  
See [ComboBox](#).
- Image  
See [Image](#).
- Link  
See [Link](#).
- LongText  
See [LongText](#).
- MultiSelect  
See [MultiSelect](#).
- Radio

Refer to the Radio step type entry for details.



- Radio

Refer to the Radio step type entry for details.

See [Radio](#).

- RichText

Refer to the RichText step type entry for details.

See [RichText](#).

- Span

See [Span](#).

- Text

See [Text](#).

## Set\_Value

### Description

Sets the field value in the browser object.

This is the list of objects that support this action:

- CheckBox

See [CheckBox](#).

- ComboBox

See [ComboBox](#).

- LongText

Use the SetValue\_InModal action to set the value of a long text field on a modal page.

See [SetValue\\_InModal](#).

See [LongText](#).

- MultiSelect

See [MultiSelect](#).

- Pwd

See [Pwd](#).

- Radio

Refer to the Radio step type entry for details.

See [Radio](#).



- Text

See [Text](#).

## Example

### Image: Example of the Set\_Value action

This example illustrates the Set\_Value action.

LongText	▼	Set_Value	▼	name=SQA_SIMPLEREC_SQA_DESCRIPTION	long
Text	▼	Set_Value	▼	name=SQA_SIMPLEREC_PSE_DESCR	ebox
CheckBox	▼	Set_Value	▼	name=SQA_SIMPLEREC_SQA_CHECKBOX	Y
ComboBox	▼	Set_Value	▼	name=SQA_SIMPLEREC_SQA_COMBO_OPTION	2
Radio	▼	Set_Value	▼	name=SQA_SIMPLEREC_SQA_OPTION	2

## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

This is the list of objects that support this action:

- Button

See [Button](#).

- CheckBox

See [CheckBox](#).

- ComboBox

See [ComboBox](#).

- LongText

See [LongText](#).

- MultiSelect

See [MultiSelect](#).

- Radio

Refer to the Radio step type entry for details.

See [Radio](#).

- Span

See [Span](#).

- Text

See [Text](#).

## Example

### Image: Example of the Verify action

This example illustrates the Verify action.

Text	▼	Verify	▼	ID=PSE_DATES_SQA_DATE	#TODAY
------	---	--------	---	-----------------------	--------

## Reserved Words

This section defines PTF reserved words. The reserved words are listed alphabetically.

### #CHECK#

#### Description

The #CHECK# reserved word modifies the behavior of a Set\_Value action to be more like a Verify action. This can be useful when you want to set data in a particular field for one test case and verify the data in the same field for a different test case.

**Note:** If the values are not equal, PTF will always try to update the value (unless the object is display-only). If the values are equal, PTF will not update the value.

#### Example

For example, a text box could be set and verified with the following two steps:

#### Image: Example of setting a value and verifying a value in two steps

This example illustrates setting a value and verifying a value in two steps.

Text	▼	Set_Value	▼	ID=PA_CLC_SUMMARY_CALC_NAME	KUSPTEST
Text	▼	Verify	▼	ID=PA_CLC_SUMMARY_CALC_NAME	KUSPTEST

Suppose, however, that the test calls for using two test cases. The first test case sets the calculation name equal to KUSPTEST. The second test case verifies the value of KUSPTEST.

The test case that sets the value to KUSPTEST would be constructed as shown in the first step of the previous example. The test case that verifies the value as KUSPTEST would be constructed as shown in the following example:

#### Image: Example of setting a value and verifying a value using #CHECK#

This example illustrates setting a value and verifying a value using #CHECK#

Text	▼	Set_Value	▼	ID=PA_CLC_SUMMARY_CALC_NAME	#CHECK#KUSPTEST
------	---	-----------	---	-----------------------------	-----------------

## #DIS#

### Description

This reserved word verifies a value and also checks whether the object is display-only. It logs a Fail if the object is not display-only or if the expected value does not match the application value.

If you use #DIS# without a value, then the value is ignored and #DIS# only checks for whether the field is disabled.

This reserved word is useful when, for example, PeopleCode is expected to make an object visible but not editable.

### Example

The following example checks whether the Benefit Commencement Date field date is display-only and the value is equal to 07/12/2000:

#### Image: Example of using #DIS#

This example illustrates using #DIS# to verify that a field is display only and contains a specific date.

Text	▼	Set_Value	▼	Name=PA_CALCULATION_BEN_CMDT_DATE	#DIS#07/12/2000
------	---	-----------	---	-----------------------------------	-----------------

## #DTTM

### Description

Similar to #TODAY, the #DTTM reserved word inserts the current date and time into a field in the application.

### Related Links

See Also:[#TODAY](#)

## #EXIST#

### Description

Verifies the existence of a field.

If the field exists in the application, a Pass is logged. If the field is not found, a Fail is logged.

If a value is passed after the closing # and the field exists, PTF tries to set the field to that value.

## Example

In this example, the first step checks for whether the Benefit Plan field exists in the application and logs a Fail if it is not found. The second step not only checks for the existence of the field, it attempts to enter the value *KUHP* into it:

### Image: Example of using #EXIST#

This example illustrates using #EXIST# , the first step checks for whether the Benefit Plan field exists in the application and logs a Fail if it is not found. The second step not only checks for the existence of the field, it attempts to enter the value KUHP into it.

Text	Set_Value	Name=PA_CLC_PLN_INPT_BENEFIT_PLAN	#EXIST#
Text	Set_Value	Name=PA_CLC_PLN_INPT_BENEFIT_PLAN	#EXIST#KUHP

## Related Links

[#NOTEXIST#](#)

## #FAIL#

### Description

This reserved word works the same as #CHECK# but does not update the value after performing the comparison. If a mismatch is found, a Fail is logged; otherwise, a Pass is logged.

You would use #FAIL# rather than #CHECK# when you do not want to update the field if a mismatch exists.

### Example

In this example, the PTF test logs a Fail if the Summary Calculation Name field is not equal to KUSPTTEST:

### Image: Example of #FAIL#

This example illustrates using #FAIL#, the PTF test logs a Fail if the Summary Calculation Name field is not equal to KUSPTTEST.

Text	Set_Value	ID=PA_CLC_SUMMARY_CALC_NAME	#FAIL#KUSPTTEST
------	-----------	-----------------------------	-----------------

## Related Links

[#WARN#](#)

## #IGNORE

### Description

Place the #IGNORE reserved word in the Value field of a Test.Exec step to skip the call to the child test. Suppose you have a parent test with two test cases. In the first test case, the parent test calls a child test. In

the second test case, the parent does not call the child. Use the **#IGNORE** reserved word in the Value field with the second test case to skip calling the child for that test case.

In this example, the first step for the test case calls the test **CHILD\_ONE** with test case **CASE\_01**. The second step skips the call to **CHILD\_TWO** for this test case.

### Image: Example of the **#IGNORE** reserved word

This example illustrates

Type	Action	Recognition	Value
Test	Exec	<b>CHILD_ONE</b>	CASE_01
Test	Exec	<b>CHILD_TWO</b>	#IGNORE

## #LIKEF#

### Description

The **#LIKEF#** and **#LIKEW#** reserved words are similar to the **#FAIL#** and **#WARN#** reserved words except that they look for similar values, not an exact match. If a similar match is not found, **#LIKEF#** logs a Fail and **#LIKEW#** logs a Warning.

Similar to the behavior of **#FAIL#** and **#WARN#** (and unlike the behavior of **#CHECK#**), if the comparison fails, PTF does not update the value. The steps only affect the error state of the execution log.

This table details ways **#LIKEW#** or **#LIKEF#** can match strings:

<b>Type of Match</b>	<b>Pattern</b>	<b>Match (Log a Pass)</b>	<b>No Match (Log a Fail or Warn)</b>
Multiple characters	a*a	aa, aBa, aBBBa	ABC
Multiple characters	*ab*	abc, AABBB, Xab	aZb , bac
Multiple characters	ab*	abcdefg, abc	cab, aab
Special character	a[*]a	a*a	Aaa
Single character	a?a	aaa, a3a, aBa	ABBBa
Single digit	a#a	a0a, a1a, a2a	aaa, a10a
Range of characters	[a-z]	f, p, j	2, &
Outside a range	[!a-z]	9, &, %	b, a
Not a digit	[!0-9]	A, a, &	0, 1, 9
Combined	a[!b-m]#	~ An9, az0, a99	abc, aj0

## Example

Suppose a test requires verification of only the first several characters of a text entry. In the following example, the first step logs a Fail if the first two characters of the Benefit Plan field are not equal to US. The second step logs a Fail unless the first two characters of the Benefit Plan field are equal to US and the last character is equal to 1:

### Image: Example of using #LIKEF#

This example illustrates using #LIKEF# to verify only the first several characters of a text entry.

Text	Set_Value	Name=PA_CLC_PLN_INPT_BENEFIT_PLAN	#LIKEF#US*
Text	Set_Value	Name=PA_CLC_PLN_INPT_BENEFIT_PLAN	#LIKEF#US*1

#LIKEF# and #LIKEW# only compare the date text of a date/time value. For example, some fields contain the current date and time. Use the #LIKEF##TODAY\* construction to compare just the date portion of a Datetime field and ignore the time portion.

For example:

### Image: Example of using #LIKEF##TODAY\*

This example illustrates using #LIKEF##TODAY to verify if a specific date is today's date.

Text	Set_Value	Name=PA_PROP_VOUCH_CREAT_DTTM	#LIKEF##TODAY*
------	-----------	-------------------------------	----------------

## #LIKEW#

### Description

The #LIKEW# reserved word is used the same as #LIKEF# except it logs a Warning rather than a Fail. For complete details for using #LIKEW# see #LIKEF#.

### Related Links

[#LIKEF#](#)

## #LIST#

### Description

This reserved word checks the values of a ComboBox. It works with either the full text entries in the combo box or the metadata translation (XLAT) values of the entries.

Use #LIST# with a Set\_Value action to check one or more values and then set an item in a drop-down list box, list the items separated by a vertical pipe (|) and place brackets ([]) around the item that you want to select. If the value in the field is not the same as the value in brackets, PTF logs an error and sets the value in the field to the value in brackets.

### Example

This example shows the use of the #LIST# reserved word:

In this example, the first step verifies the existence of items in the list. The second step verifies that the items exist and verifies that Individual is selected.

#### Image: Example of using #LIST#

This example illustrates using #LIST#, the first step verifies the existence of items in the list. The second step verifies that the items exist and verifies that Individual is selected.

ComboBox	Set_Value	Name=PA_CALCULATION_CALCULATION_TYPE	#LIST#Individual Pre-Defined Group Pre-Defined List
ComboBox	Set_Value	Name=PA_CALCULATION_CALCULATION_TYPE	#LIST#[Individual] Pre-Defined Group Pre-Defined List

This example is similar to the previous example, but it refers to the entries by the metadata translation (XLAT) values rather than the text that actually appears in the combo box:

#### Image: Example of using #LIST# with translate values

This example illustrates using #LIST# with translate values.

ComboBox	Set_Value	Name=PA_CALCULATION_CALCULATION_TYPE	#LIST# GIL
ComboBox	Set_Value	Name=PA_CALCULATION_CALCULATION_TYPE	#LIST#[ ]GIL

## #NOTEXIST#

### Description

The opposite of the #EXIST# reserved word, #NOTEXIST# verifies that a field does not exist.

If the field does not exist, a Pass is logged. If the field does exist, a Fail is logged.

### Related Links

[#EXIST#](#)

## #NOTHING

### Description

PTF ignores any step with a Set\_Value or Verify action where the Value field is empty, or blank. The #NOTHING reserved word enables you to use SET\_VALUE to set a field to blank or select a blank value from a drop-down list box. You can use #NOTHING with a Verify action to verify that a field is blank.

The #NOTHING reserved word does not have a closing pound sign (#). It cannot be used in combination with other reserved words.

---

**Note:** Leaving the Value field of a test step blank does not have the same effect as using the #NOTHING reserved word. PTF ignores any Set\_Value or Verify action where the Value field is blank.

---

## Example

In the following example, in the first step #NOTHING selects a blank value in the Calculation Reason field and then, in the next step, it verifies that the field is blank:

### Image: Example of using #NOTHING

This example illustrates using #NOTHING to select a blank and to verify that the field is blank.

ComboBox	Set_Value	Name=PA_CALCULATION_CALC_REASON	#NOTHING
ComboBox	Verify	Name=PA_CALCULATION_CALC_REASON	#NOTHING

## #PREFIX#

### Description

The #PREFIX# reserved word substitutes the text in the Prefix field in the Test Editor for the #PREFIX# string in the Value field.

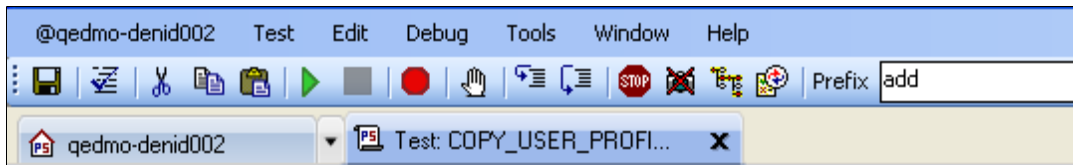
This substitution is useful when developing a test that adds new data. It enables you to modify each new added record slightly so that the test is able to successfully add unique data each time the test is executed.

### Example

Suppose you entered *add* in the Prefix field, as in this example:

### Image: Example of Prefix field

This example illustrates the prefix field with the value add.



The following test step would enter the value *addUSER* into the DERIVED\_CLONE\_OPRID field:

### Image: Example of using #PREFIX#

This example illustrates a test step where the #PREFIX# is used in the value field.

Text	Set_Value	Name=DERIVED_CLONE_OPRID	#PREFIX#USER
------	-----------	--------------------------	--------------

---

**Note:** The #PREFIX# reserved word can only be used at the beginning of the text in the Value field.

---

## #TODAY

### Description

Substitutes the current date.



---

**Note:** The #TODAY reserved word does not have a closing pound sign (#). It cannot be followed by another reserved word.

---

## Example

Suppose you have the following test instruction:

```
12. Enter the current date into the Event Date field.
```

The following step sets the value of the Event Date field to the date at the moment of test execution:

### Image: Example of using #TODAY

This example illustrates using #TODAY.

Text	Set_Value	ID=PA_CLC_EMP_VW_EVENT_DT	#TODAY
------	-----------	---------------------------	--------

You can use the + or – operators in conjunction with the #TODAY reserved word to reference a date in the future or past. In this example, the test verifies that the calculation event date is 10 days in the future:

### Image: Example of using #TODAY+10

This example illustrates using #TODAY+10 to verify that the calculation event date is 10 days in the future

Text	Set_Value	ID=PA_CLC_EMP_VW_EVENT_DT	#TODAY+10
------	-----------	---------------------------	-----------

## #WARN#

### Description

This reserved word works the same as #CHECK# but does not update the value after performing the comparison. If a mismatch is found, a Warning is logged; otherwise, a Pass is logged.

You would use #WARN# rather than #CHECK# when you do not want to update the field if a mismatch exists.

### Related Links

[#FAIL#](#)

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## System Variables

System variables are populated by PTF at runtime. The following table lists PTF system variables.

<i>Variable</i>	<i>Description</i>
%case%	Current test case name.
%component%	Current component name.

<b>Variable</b>	<b>Description</b>
%env.appserver%	Application server name.
%env.database%	Database name and database type. For example: T852U11 / DB2
%env.toolsrel%	The PeopleTools version.
%eo.dbname%	Execution option database name.
%eo.dbserver%	Execution option database server name.
%eo.dbuser%	Execution option database user name.
%eo_logfolder%	Execution option log folder.
%eo.name%	Current execution option name.
%eo.platform%	Execution option platform.
%eo.pserver%	Execution option process server.
%eo.pshome%	Execution option PS_HOME path.
%eo_url%	Execution option URL.
%eo.verbose%	Execution option verbose flag.
%menu%	Current menu name.
%frame%	The current frame name.
%log.id%	Current log number.
%page%	Current page name.
%pid%	The last process instance number.
%test%	Current test name.
%test.path%	Full parent folder path for the executing test

---

## Functions

This section lists the PTF functions.

---

**Note:** Regarding the use of strings in functions: Typically, variables are used within functions, however, if you are using a string directly, it must be enclosed in quotes.

---

## Add

### Syntax

Add(*number1*|*number2*[*number3*]...)

### Description

Use the Add function to add a series of numbers. Decimals and negative numbers are supported.

### Parameters

<i>number1</i>	Number to be added.
<i>number2</i>	Number to be added.
<i>number3...</i>	(Optional) A series of additional numbers to be added.

### Returns

Sum of the numbers in the parameters.

### Example

The following table presents examples of using Add.

<i>Expression</i>	<i>Result</i>
Add(10  -12  -3  4  6)	5
Add(10.43  10.55  -6.789  -178)	-163.809

## Concat

### Syntax

Concat(*string1*|*string2*[*string3*...])

### Description

Concatenates the strings in the parameters.

### Parameters

<i>string1</i>	Beginning string for concatenation
<i>string2</i>	A string to be concatenated to <i>string1</i> .
<i>string3...</i>	(Optional) Additional strings to be concatenated.



## Returns

Returns the day portion of the date value provided as a parameter.

## Example

The following table presents examples of using the Day function:

<i>Expression</i>	<i>Result</i>
Day(February 13, 2012)	13
Day(Date())	13

## Divide

### Syntax

Divide(*number1*|*number2*|*dec=dec\_places*)

### Description

Use the Divide function to perform division. Decimals and negative numbers are supported. Optionally specify the number of decimal places.

### Parameters

<i>number1</i>	The dividend.
<i>number2</i>	The quotient.
<i>dec=dec_places</i>	(Optional) The number of decimal places. The maximum is 10. The default is zero. Note that "dec=" must be included in the parameter.

## Returns

The result of dividing *number1* by *number2* rounded to *dec=dec\_places* decimals.

## Example

The following table presents examples of using the Divide function:

<i>Expression</i>	<i>Result</i>
Divide(75  13.5)	6
Divide(-75  13.5  dec=5)	-5.55556

## GetField

### Syntax

GetField(*string*, *segment*, *delimiter*)

### Description

GetField returns the substring from a specified segment of a character-delimited text string.

### Parameters

<i>string</i>	A character-delimited text string.
<i>segment</i>	An integer specifying which segment of the string will be returned, counting left to right. Specify a negative integer to count right to left.
<i>delimiter</i>	The character that delimits each segment in the string.

### Returns

Returns the substring between the delimiters in the specified segment of the string.

### Example

The following table presents examples of using GetField.

<b>Expression</b>	<b>Result</b>
GetField("a/b/c"   1   /)	a
GetField("a/b/c"   2   /)	b
GetField("a/b/c"   5   /)	blank
GetField("a/b/c"   -1   /)	c

## Hour

### Syntax

Hour(*time\_value*)

### Description

Returns the hour portion of the time value provided as a parameter.

### Parameters

<i>time_value</i>	A time value, such as the value returned by the Time() function.
-------------------	--

## Returns

Returns the hour portion of the time value provided as a parameter.

## Example

The following table presents examples of using the Hour function:

<b><i>Expression</i></b>	<b><i>Result</i></b>
Hour(13:07:25)	13
Hour(Time())	13

## InStr

### Syntax

InStr(*within\_string*|*substring*)

### Description

Locates a substring within a string of text and returns the starting position of the substring as an integer..

### Parameters

***substring***

The text you are searching for.

The string parameter is not case sensitive.

***within\_string***

The text string you are searching within.

### Returns

Returns an integer indicating the starting position of substring in within\_string.

InStr returns 0 if substring does not appear in within\_string. It returns 1 if substring is empty.

## Example

The following table presents examples of using the InStr function.

<b><i>Expression</i></b>	<b><i>Result</i></b>
instr("ABCDEFGH" "c")	3
instr("ABCDEFGH" "C")	3
instr("ABCDEFGH" "CDE")	3
instr("ABCDEFGH" "zz")	0

<i><b>Expression</b></i>	<i><b>Result</b></i>
instr("ABCDEFGH")	1
instr("ABCDEFGH" "A")	1

## LCase

## Syntax

LCase(*string*)

### Description

Converts a string to lowercase.

## Parameters

<i>string</i>	The string to be converted.
---------------	-----------------------------

## Returns

Returns a string resulting from converting string to lowercase.

### Example

The following table presents example of using the LCase function.

<i><b>Expression</b></i>	<i><b>Result</b></i>
lcase("Hello World 1234")	hello world 1234

**Left**

## Syntax

Left(*string*|*length*)

### Description

Extracts a substring of a specified number of characters from the left side of a string.

## Parameters

<i>string</i>	A string from which to extract a substring.
---------------	---

<i>length</i>	A number specifying the number of characters in the substring.
---------------	--



## Returns

Returns a substring *length* characters long from the left side of a string.

## Example

The following table presents example of using Left function.

<i><b>Expression</b></i>	<i><b>Result</b></i>
left(“Hello World”[5])	Hello

## Len

## Syntax

Len(*string*)

### Description

Returns the length of string as an integer.

## Parameters

<i>string</i>	A text string.
---------------	----------------

## Returns

Returns an integer indicating the length of string.

### Example

The following table presents example of using Len function.

<i>Expression</i>	<i>Result</i>
len(“Hello World”)	11

## MakeDate

## Syntax

MakeDate(*year\_value* | *month\_value* | *day\_value*)

### Description

This function returns a date value based on the year, month, and day values passed to the function as parameters.

## Parameters

<i>year_value</i>	A number representing the year, such as the value returned by the Year() function.
<i>month_value</i>	A number representing the month, such as the value returned by the Month() function.
<i>day_value</i>	A number representing the day, such as the value returned by the Day() function.

## Returns

Returns a date value.

## Example

The following table presents examples of using the MakeDate function. In these examples, the current date was February 13, 2012:

<b>Expression</b>	<b>Result</b>
MakeDate(Add(Year(Date())) 1) Add(Month(Date())) 11) Add(Day(Date())) 1)	January 14, 2014
MakeDate(Add(Year(Date())) 1) Add(Month(Date())) -1) Add(Day(Date())) -1)	January 12, 2013

## MakeTime

### Syntax

MakeTime(*hour\_value* | *minute\_value* | *second\_value* | *rollover\_boolean*)

### Description

This function returns a time value based on the hour, minute, and second values passed to the function as parameters.

### Parameters

<i>hour_value</i>	A number representing the hour, such as the value returned by the Hour() function.
<i>minute_value</i>	A number representing the minute, such as the value returned by the Minute() function.
<i>second_value</i>	A number representing the second, such as the value returned by the Second() function.
<i>rollover_boolean</i>	(Optional) Rolls over the hour to 0 when hour_value reaches 24.

True - Returns (hour\_value – 24) when hour\_value is greater than 24.

False - Returns hour\_value even when hour\_value is greater than 24.

The default value is True.

## Returns

Returns a time value.

## Example

The following table presents examples of using the MakeTime function:

<b><i>Expression</i></b>	<b><i>Result</i></b>
MakeTime(Add(Hour(Time())) 12) Add(Minute(Time())) -30) Second(Time()))	7:00:00 AM
MakeTime(23 Add(60 30) 0 False)	24:30:00
MakeTime(23 Add(60 30) 0 True)	00:30:00
MakeTime(23 Add(60 -30) 0)	23:30:00

## Minute

### Syntax

Minute(*time\_value*)

### Description

Returns the minute portion of the time value provided as a parameter.

### Parameters

***time\_value*** A time value, such as the value returned by the Time() function.

### Returns

Returns the minute portion of the time value provided as a parameter.

## Example

The following table presents examples of using the Minute function:

<b><i>Expression</i></b>	<b><i>Result</i></b>
Minute(13:07:25 )	7
Minute(Time())	7

## Month

## Syntax

Month(*date\_value*)

### Description

Returns the month portion of the date value provided as a parameter.

## Parameters

<i>date_value</i>	A date value, such as the value returned by the Date() function.
-------------------	--

## Returns

Returns the month portion of the date value provided as a parameter.

## Example

The following table presents examples of using the Month function:

<b><i>Expression</i></b>	<b><i>Result</i></b>
Month(February 13, 2012)	2
Month(Date())	2

## Multiply

## Syntax

Multiply(*number1*|*number2*[[*dec=dec places*]])

### Description

Use the Multiply function to perform multiplication. Decimals and negative numbers are supported. Optionally specify the number of decimal places.

## Parameters

<i>number1</i>	First factor.
----------------	---------------

*number2* Second factor.

*dec=dec\_places*

(Optional) The number of decimal places. The maximum is 10. The default is zero. Note that "dec=" must be included in the parameter.

## Returns

The result of multiplying *number1* by *number2* rounded to *dec=dec\_places* decimals.

## Example

The following table presents examples of using Multiply function.

<b>Expression</b>	<b>Result</b>
Multiply(10.3  13.45)	139
Multiply(10.3  -13.45 dec=3)	-138.535

## Now

### Syntax

Now()

### Description

Returns the current datetime, using the date format specified in the current execution option.

### Returns

The current datetime.

### Example

The following table presents example of using Now function.

<b>Expression</b>	<b>Result</b>
Now()	07/04/2011 12:20 PM

## Replace

### Syntax

Replace(*source*|*find*|*replace*)

### Description

Use the Replace function to replace every occurrence of a substring found in a string with a new substring.

## Parameters

<i>source</i>	A string in which you want to replace substrings.
<i>find</i>	A string equal to the substring of source you want to replace.
<i>replace</i>	A string with which to replace occurrences of find in source.

## Returns

Returns a string resulting from replacing every occurrence of find found in source with replace.

## Example

The following table presents example of using Replace function.

<b>Expression</b>	<b>Result</b>
replace("original text" "i" 77)	Or77g77nal text

# Right

## Syntax

Right(*string*|*length*)

## Description

Use the Right function to extract a substring of a specified number of characters from the right side of a string.

## Parameters

<i>string</i>	A string from which to extract a substring.
<i>length</i>	A number specifying the number of characters in the substring.

## Returns

Returns a substring *length* characters long from the right side of a *string*.

## Example

The following table presents example of using Right function.

<b>Expression</b>	<b>Result</b>
right("Hello World" 5)	World

## Round

### Syntax

Round(*number*[[*dec=dec\_places*]])

### Description

Use the Round function to round a number. Decimals and negative numbers are supported. Optionally specify the number of decimal places.

### Parameters

<i>number1</i>	First factor.
<i>number2</i>	Second factor.
<i>dec=dec_places</i>	(Optional) The number of decimal places. The maximum is 10. The default is zero. Note that "dec=" must be included in the parameter.

### Returns

The result of rounding *number1* to *dec=dec\_places* decimal places.

### Example

The following table presents example of using Round function.

<b><i>Expression</i></b>	<b><i>Result</i></b>
Round(-130.456)	-130
Round(-130.456 dec=2)	-130.46
Round(-130.455 dec=2)	-130.45

## Second

### Syntax

Second(*time\_value*)

### Description

Returns the second portion of the time value provided as a parameter.

### Parameters

<i>time_value</i>	A time value, such as the value returned by the Time() function.
-------------------	--

## Returns

Returns the second portion of the time value provided as a parameter.

## Example

The following table presents examples of using the Second function:

<b><i>Expression</i></b>	<b><i>Result</i></b>
Second(13:07:25 )	25
Second(Time())	25

## SubStr

### Syntax

SubStr(*source\_str*|*start\_pos*[|*length*])

### Description

Extracts a substring of a specified number of characters beginning at a specified location in a source string.

If length is not specified, SubStr returns the substring starting at the position specified in start\_pos and continuing to the end of the string.

### Parameters

<b><i>source_str</i></b>	A string from which to extract a substring.
<b><i>start_pos</i></b>	A number representing the character position in source_str where the substring starts, starting at 1.
<b><i>length</i></b>	(Optional) A number specifying the number of characters in the substring.

### Returns

Returns a string equal to a substring *length* characters long beginning at character *start\_pos* of *source\_str*.

## Example

The following table presents examples of using SubStr function.

<b><i>Expression</i></b>	<b><i>Result</i></b>
substr("12345678" 2 3)	234
substr("12345678" 2)	2345678



## Subtract

### Syntax

Subtract(*number1*|*number2*[*number3*]...)

### Description

Use the Subtract function to subtract a series of numbers. Numbers can be decimal and negative.

### Parameters

<i>number1</i>	Initial number.
<i>number2</i>	Number to be subtracted.
<i>number3...</i>	(Optional) A series of additional numbers to be subtracted.

### Returns

The result of subtracting *number2*, *number3*, etc., from *number1*.

### Example

The following table presents examples of using Subtract function.

<i>Expression</i>	<i>Result</i>
Subtract(10 2 3)	5
Subtract(10 -2 -3)	15

## Sum

### Syntax

Sum(*Index*| *Value*| *Delimiter*)

### Description

Sum works with the HTMLTable indexes.

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**Note:** In PeopleTools releases prior to 8.53 commas were supported as a delimiter for the sum function parameters. If any tests exist in the database using that format, the commas will be converted to pipes in the upgrade.

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### Parameters

<i>Index</i>	The HTMLTable index string, such as 2/5/4. An index string is the return value of CellGetIndex.
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See [CellGetIndex](#).

***Value***

The value that you want to add or subtract. The default action is addition.

***Section***

The section of the index that will be modified.

***Delimiter***

The character that delimits each section in the text value.

The character must be wrapped in quotes.

## Example

The following table presents examples of using Sum function.

<b><i>Expression</i></b>	<b><i>Result</i></b>
sum("2/5/4" 2 1 "/")	4/5/4  2 is added to the first section of the string.
sum("2/5/4" 1 3 "/")	2/5/3  1 is subtracted from the third section of the string.
Sum(&index -4 3 "/")	4 is subtracted from the third section of the string in the variable &index.

## Time

### Syntax

Time()

### Description

Returns the current time, using the date format specified in the current execution option.

### Parameters

None

### Returns

Returns a string with the current time.

### Example

The following table presents example of using the Time function with the Regional Options set to 24 hour format and 12 hour format, respectively:

<b><i>Expression</i></b>	<b><i>Result</i></b>
Time()	13:07:25
Time()	1:07:25 PM

## Trim

## Syntax

Trim(*string*)

### Description

Returns a string with all leading and trailing spaces removed.

## Parameters

<i>string</i>	A text string.
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## Returns

Returns a string with all leading and trailing spaces removed.

## Example

The following table presents example of using trim function.

<i>Expression</i>	<i>Result</i>
trim(“ Hello World ”)	Hello World

## UCase

## Syntax

UCase(*string*)

### Description

Converts a string to uppercase.

## Parameters

<i>string</i>	The string to be converted.
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## Returns

Returns a string resulting from converting string to uppercase.

## Example

The following table presents example of using UCase function.

<b><i>Expression</i></b>	<b><i>Result</i></b>
ucase("Hello World 1234")	HELLO WORLD 1234

## Weekday

### Syntax

Weekday(*date\_value*)

### Description

Returns an integer value, ranging from 1 through 7, which represents the day of the week for the date value provided as a parameter, where Sunday equals 1 and Saturday equals 7.

### Parameters

*date\_value*

A date value, such as the value returned by the Date() function, or "10/29/2104"

### Returns

Returns an integer value, ranging from 1 through 7, which represents the day of the week for the date value provided as a parameter, where Sunday equals 1 and Saturday equals 7.

## Example

The following table presents examples of using the Weekday function:

<b><i>Expression</i></b>	<b><i>Result</i></b>
Weekday(October 18, 2014)	6
Weekday(Date())	3
Weekday("07/29/2013")	2

## Year

### Syntax

Year(*date\_value*)

### Description

Returns the year portion of the date value provided as a parameter.

## Parameters

*date\_value*

A date value, such as the value returned by the Date() function.

## Returns

Returns the year portion of the date value provided as a parameter.

## Example

The following table presents examples of using the Year function:

<b><i>Expression</i></b>	<b><i>Result</i></b>
Year(February 13, 2012 )	2012
Year(Date())	2012



# Reserved Words Quick Reference

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## Reserved Words

The following table briefly explains PTF reserved words.

<b>#CHECK#</b>	Checks a value in an object against the expected value defined in the PTF test. Updates the value if no match exists.  See <u>#CHECK#</u> .
<b>#DIS#</b>	Checks whether an object is display-only.  See <u>#DIS#</u> .
<b>#DTM</b>	Enters the current date and time into the application.  See <u>#DTM</u> .
<b>#EXIST# and #NOTEXIST#</b>	Check whether a field exists or does not exist on the page.  #Exist can update the field if a value is passed following the closing # sign.  See <u>#EXIST#</u> , <u>#NOTEXIST#</u> .
<b>#FAIL# and #WARN#</b>	Same as #CHECK# but do not update the value. If the values do not match, PTF logs a Fail or Warning.  See <u>#FAIL#</u> , <u>#WARN#</u> .
<b>#IGNORE</b>	Place the #IGNORE reserved word in the Value field of a Test. Exec step to skip the call to the child test.  See <u>#IGNORE</u> .
<b>#LIKEF# and #LIKEW#</b>	Match strings using LIKE. If no match exists, PTF logs a Fail or Warning. PTF does not update the value.  See <u>#LIKEF#</u> , <u>#LIKEW#</u> .
<b>#LIST#</b>	Checks the values in a drop-down list box. Use a   to separate items in the Value field.  This reserved word is used only with a ComboBox object.  See <u>#LIST#</u> .

**#NOTHING**

Deletes a value in the object or verifies that it is blank. If the object is a ComboBox and the action is Set, then PTF selects a blank item.

See #NOTHING.

**#PREFIX#**

Substitutes the text in the Prefix field in the Test Editor for *#PREFIX#* in the Value field.

See #PREFIX#.

**#TODAY**

Enters the current date into the application.

See #TODAY.