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# PeopleTools 8.62: Test Framework

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**December 2025**

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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.

### Hosted PeopleSoft Online Help

You can access the hosted PeopleSoft Online Help on the [Oracle Help Center](#). The hosted PeopleSoft Online Help 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. The hosted PeopleSoft Online Help is available in English only.

To configure the context-sensitive help for your PeopleSoft applications to use the Oracle Help Center, see [Configuring Context-Sensitive Help Using the Hosted Online Help Website](#).

### Locally Installed PeopleSoft Online Help

If you're setting up an on-premises PeopleSoft environment, and your organization has firewall restrictions that prevent you from using the hosted PeopleSoft Online Help, you can install the online help locally. Installable PeopleSoft Online Help is made available with selected PeopleSoft Update Images and with PeopleTools releases for on-premises installations, through the [Oracle Software Delivery Cloud](#).

Your installation documentation includes a chapter with instructions for how to install the online help for your business environment, and the documentation zip file may contain a README.txt file with additional installation instructions. See *PeopleSoft 9.2 Application Installation* for your database platform, “Installing PeopleSoft Online Help.”

To configure the context-sensitive help for your PeopleSoft applications to use a locally installed online help website, see [Configuring Context-Sensitive Help Using a Locally Installed Online Help Website](#).

### Downloadable PeopleBook PDF Files

You can access downloadable PDF versions of the help content in the traditional PeopleBook format on the [Oracle Help Center](#). 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>Typographical Convention</b>	<b>Description</b>
<b>Key+Key</b>	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 <b>Alt+W</b> , hold down the <b>Alt</b> key while you press the <b>W</b> 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.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object.  Ampersands also precede all PeopleCode variables.

<b>Typographical Convention</b>	<b>Description</b>
⇒	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.

## 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)

## Translations and Embedded Help

PeopleSoft 9.2 software applications include translated embedded help. With the 9.2 release, PeopleSoft aligns with the other Oracle applications by focusing our translation efforts on embedded help. We are not planning to translate our traditional online help and PeopleBooks documentation. Instead we offer very direct translated help at crucial spots within our application through our embedded help widgets. Additionally, we have a one-to-one mapping of application and help translations, meaning that the software and embedded help translation footprint is identical—something we were never able to accomplish in the past.

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## Using and Managing the PeopleSoft Online Help

Select About This Help in the left navigation panel on any page in the PeopleSoft Online Help to see information on the following topics:

- Using the PeopleSoft Online Help.
  - Managing hosted Online Help.
  - Managing locally installed PeopleSoft Online Help.
- 

## PeopleTools Related Links

[PeopleTools 8.62 Home Page](#)

[PeopleSoft Search and Insights Home Page](#)

“PeopleTools Product/Feature PeopleBook Index” (Getting Started with PeopleTools)

[PeopleSoft Online Help](#)

[PeopleSoft Information Portal](#)

[PeopleSoft Spotlight Series](#)

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## Contact Us

Send your suggestions to [psoft-infodev\\_us@oracle.com](mailto:psoft-infodev_us@oracle.com).

Please include the applications update image or PeopleTools release that you’re using.

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# Getting Started with 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 run more tests with greater accuracy during a shorter time.

PTF works by replicating the actions of a single user run 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 run against the application to verify whether the application still behaves as expected. This method for capturing and running 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.
- 

## Terminology

This table defines some PTF terms:

<b><i>Field or Control</i></b>	<b><i>Description</i></b>
Asset	See Test Asset.
Runtime Options	A list of application environments available to the tester. Runtime 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.
Explorer	See PTF Explorer.
Grid	See Scroll.
Hook	Establish a connection between a PTF test and a PeopleSoft application browser.
Library	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 run by itself. Rather, libraries are meant to be called (sometimes repetitively) by tests.
Log	An object that saves the experience of a single test run event. Logs report the success or failure of the testing process and include messages and screen shots to indicate where errors occurred.
Log Manager	A tool that enables PTF administrators to purge unneeded logs

<b>Field or Control</b>	<b>Description</b>
Maintenance	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 running 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 running the test.
Mass Updated	A tool that enables you to modify test steps across multiple tests using search and replace.
Project	A PeopleTools Application Designer project. Projects are the primary means for moving PTF Tests and Test Case objects between databases.
PTF Client	An instance of the PTF runnable program installed on an individual user's machine.
PTF Environment	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.
PTF Explorer	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 start up and will always be the leftmost pane in the PTF user interface. It is labeled with the name of the application database.
Recognition	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.
Recorder	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.
Screen Shot	An image generated during test run. 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.

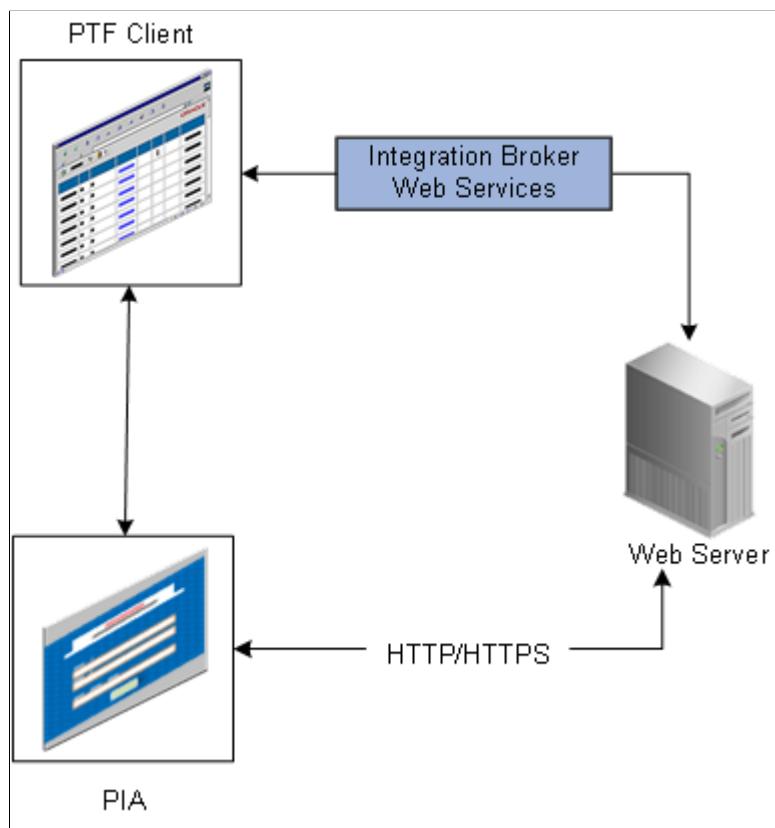
<b>Field or Control</b>	<b>Description</b>
Scroll	A scroll represents a rowset, which is a set of rows of data uniquely identified by one or more key fields. Rows in a scroll can contain child rowsets. Scrolls are rendered on PeopleSoft pages as grids of data or as a grouping of fields in a scroll area.
Scroll Area	See Scroll.
Step	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.
Test Asset	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: <ul style="list-style-type: none"> <li>• Runtime Options</li> <li>• Libraries</li> <li>• Logs</li> <li>• Tests</li> <li>• Test Cases</li> </ul>
Test	The primary type of test asset in PTF. Tests contain steps that replicate the action of a tester running 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 run. 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.

# Installing and Configuring PTF

## Understanding the PTF Development Environment

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

This diagram illustrates the PTF development environment.



A PTF development environment consists of the following elements:

- A PTF client instance.
- An internet browser instance.
- A connection to a PeopleSoft application that is to be tested through the Integration Broker Web Services.

PeopleSoft Test Framework (PTF) client is a standalone program that runs on a Microsoft Windows 64 bit machine.

To record tests, use Chrome or Microsoft Edge. The browsers Chrome, Firefox, and Microsoft Edge are supported to run tests. Refer to the Certifications tab on My Oracle Support for current information on supported browsers.

PTF client connects to PeopleSoft application database using a secure HTTPS connection through PeopleTools Integration Broker web services which runs on the web server. All the recorded tests are saved to a test repository in the application database. While executing a test, the test repository interacts with the web server.

Pure Internet Architecture (PIA) verifies a stable Integration Broker setup, and a secured access to the PTF client. You can define the PTF Configuration Options and evaluate the SSL certificate requirements using the PIA. The PIA connects to the web server through a web browser using HTTP/HTTPS.

---

**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.

To configure an environment for PTF, you need to complete the following tasks:

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

## 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 > Integration 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:

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

Gateway ID LOCAL

Local Gateway     Load Balancer

URL http://example.com:8020/PSIGW/PeopleSoftListeningConnector

Inbound Gateways    JMS Administration

Ping Gateway

Gateway Setup Properties

Load Gateway Connectors

The port number in the URL (8020 in this example) is the http port of the web server.

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

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:

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

Node Name	App Server URL	User ID	Password	Tools Release	Domain Password	Ping Node	Add	Remove
PSFT_LOCAL	//example.com:9010	QEDMO	*****	PT857116R_18		Ping Node	+ (highlighted)	-
QE_LOCAL	//example.com:9020	QEDMO	*****	8.57-902R_180		Ping Node	+ (highlighted)	-

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** > **Node Definitions**.
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.

## 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 Runtime 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 administrator can grant privileges to roles for a specific test folder and its content from the **Test Folder Permissions Manager**.

See details in [Securing Test Folders Using Permissions](#).

---

**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 an error message when signing on to the PTF client indicating that the UserID and Password are not correct.

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 “Defining Role Options” (Security Administration)

## Configuring the Web Profile

Complete the following steps to configure the web profile settings for the PeopleSoft application that you are testing.

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

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

- Check the **Generate HTML for Testing** check box.

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

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	?
<b>Profile Name:</b> DEV							
<input checked="" type="checkbox"/> Trace Monitoring Server ? <input type="checkbox"/> Trace PPM Agent ? <input checked="" type="checkbox"/> Show Connection & Sys Info ? <input checked="" type="checkbox"/> Show Trace Link at Signon ? <input type="checkbox"/> Show Layout ? <input type="checkbox"/> Show Overlapping Fields ? <input type="checkbox"/> Show StyleSheet Inline HTML ? <input checked="" type="checkbox"/> Generate HTML for Testing ? <input checked="" type="checkbox"/> Write Dump File ? <input type="checkbox"/> Create File from PIA HTML Page ? <input type="checkbox"/> Use Unminified JavaScript ?							

## Defining PTF Configuration Options

Use the Define Configuration Options page (PSPTTSTCONFIG) to:

- Define record and runtime options.
- Configure external command processing.

Navigation:

### PeopleTools > Lifecycle Tools > Test Framework > PTF Configuration Options

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

**Record Options**

<input checked="" type="checkbox"/> Use Page.Prompt	<input checked="" type="checkbox"/> Use Process.Run	<input checked="" type="checkbox"/> Use Page.Expand
<input checked="" type="checkbox"/> Use Message Recognition	<input checked="" type="checkbox"/> Use Scroll Variables	<input checked="" type="checkbox"/> Use Browser.Start_Login

**Runtime Options**

**Process Server List**

Server Name	[+]	-
PSNT	[+]	-

**External Command Processing**

**Command List**

Command Name	Command Path	Command File Name	Timeout (Seconds)
FILESTOP	\ServerName\Labs\Commands	FILESTOPBAT	3600
FILECHECK	\ServerName\Labs\Commands	FILECHECKBAT	3600

**Save**

## Record Options

Field or Control	Description
<b>Use Page Prompt</b>	Select to use Page Prompt and PromptOK steps during recording in place of menu navigation. The <b>Use Page Prompt</b> 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 <a href="#">Page</a> .

<b>Field or Control</b>	<b>Description</b>
<b>Use Message Recognition</b>	Select to automatically create entries for the Message Recognition feature during recording. The <b>Use Message Recognition</b> 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.
<b>Use Process Run</b>	Select to use Process Run steps during recording in place of specific object actions. The <b>Use Process Run</b> 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 actions will be handled by the Run.Process during runtime.
<b>Use Scroll Variables</b>	<p>Select to enable selection of scroll variables during recording. The <b>Use Scroll Variables</b> 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.</p> <p>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, <i>in subsequent recording actions</i>, the PTF Recorder appends the variable to the name/ID/comment recognition string in the test.</p>

<b><i>Field or Control</i></b>	<b><i>Description</i></b>
<b>Use Page Expand</b>	<p>Select to add a Page.Expand step type if the user expands a section of a page during recording. The <b>Use Page Expand</b> 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.</p> <p>If this option is selected, when a user expands a page section, two steps are inserted:</p> <ol style="list-style-type: none"> <li>1. A Page.Expand step, which is set to active.</li> <li>2. The specific action used to expand the page, which is set to inactive.</li> </ol> <p>When this option is not selected, when a user expands a page section, a step for only the specific user action is inserted.</p>
<b>Use Browser.Start_Login</b>	<p>Select this option to set the first step in a test to Browser.Start_Login. When this option is selected, the Ignore Login Steps option on the PTF Test Recorder tool bar is selected by default.</p> <p>When this option is not selected, the first step in a test is set to Browser.Start, and the Ignore Login Steps option on the PTF Test Recorder tool bar is not selected, so any immediately subsequent recorded login steps are active.</p> <p>The option selected here is the default for all users in this environment.</p>

## Run Options

<b><i>Field or Control</i></b>	<b><i>Description</i></b>
<b>Process Server List</b>	<p>Add process server names to the list that can be selected in Runtime Options.</p> <p><a href="#">Configuring Runtime Options in PTF Client</a></p>

## 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>Field or Control</b>	<b>Description</b>
<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.  <b>Note:</b> The path to the defined external command and the executable file must be located on a host accessible to the PTF client used to run the Command.
<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 [Command](#).

## Evaluating SSL Certification Requirements

By default, PeopleSoft Test Framework requires a secure connection to the application database (an HTTPS connection).

When you launch the PeopleSoft Test Framework client, if the database that you are attempting to connect to does not have a valid SSL certificate, an error message appears, indicating that the environment does not allow unsecured connections. You should check with your PeopleSoft Test Framework administrator to resolve the error.

PeopleSoft Test Framework 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 PeopleSoft Test Framework client and it attempts to connect to an unsecured database, a warning message appears indicating that the connection is not secure, but it provides an option to connect anyway.

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

1. In the application database, access the Service Operations – Search page by selecting **PeopleTools > Integration Broker > Integration Setup > Service Operation Definitions**.
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.
- 

## Installing a PTF Client

A PTF client, which can be installed on an individual user's machine, is the program that users run in order to create and run 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.

PTF client runs on Microsoft Windows operating systems that are certified for PeopleTools Client installation.

---

**Note:** If the local host machine or the remote machine are on Windows 10, then make sure the Display settings of the system is set to 100%. You can set it from the Change the size of text, apps, and other items drop down options under Scale and Layout section.

---

To install a PTF client, you need to complete the following tasks:

1. Verify requirements. See [Verifying Requirements](#).
2. Configure browser settings. See [Configuring Browser Settings](#).
3. Install the PTF client software. See [Installing the PTF Client Software](#).
4. Create a connection to a PTF environment. See [Creating a Connection to a PTF Environment](#).
5. Select a PTF environment. See [Selecting a PTF Environment](#).
6. Configure local options. See [Configuring 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. Supported Internet browsers:

- Microsoft Edge, and Chrome are required for recording tests and for identifying HTML objects using the inbuilt element inspector, and can be used for test playback.
- Microsoft Edge, Chrome, and Firefox support test playback.

---

**Note:** For details about supported browser versions, refer to the Certifications tab for your PeopleTools release on My Oracle Support (<https://support.oracle.com/>).

---

3. Microsoft .NET Framework.

If Microsoft .NET Framework is not present, you see a message stating that Microsoft .NET Framework is not installed. Install .NET Framework and restart the PTF client installation.

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.

---

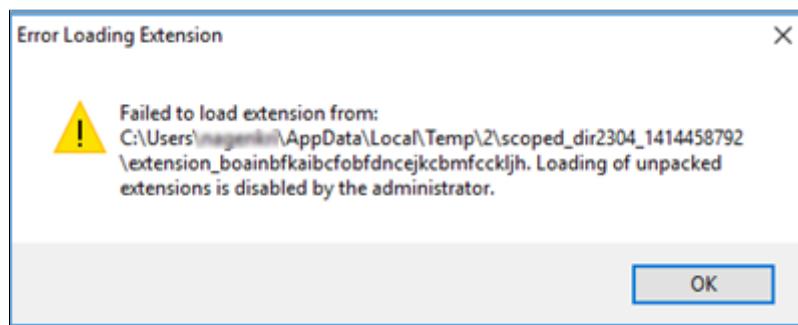
## Configuring Browser Settings

### Browser Security Settings for Chrome

The following Chrome policies can block extensions. PTF is designed to work with or without these policies. If extensions are blocked as per these policies, then the Chrome-based recorder must be enabled and installed manually as per the instructions provided in the subsequent section for installing PTF Chrome Recorder Extension:

- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Google\Chrome\ExtensionAllowedTypes] "1"="extension"
- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Google\Chrome\ExtensionInstallBlocklist] "1"="\*"
- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Google\Chrome\ExtensionInstallAllowlist] "1"="boainbfkaibcfobfdncejkcbmfcckljh"

We see the following error message when these policies are configured to block Chrome extensions:



### Browser Security Settings for Microsoft Edge

The following Microsoft Edge policies can block extensions. PTF is designed to work with or without these policies. If extensions are blocked as per these policies, then the Microsoft Edge-based recorder must be enabled and installed manually as per the instructions provided in the subsequent section for installing PTF Microsoft Edge recorder extension:

- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Microsoft\Edge\ExtensionAllowedTypes] "1"="extension"

- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Microsoft\Edge\ExtensionInstallBlocklist] "1"="\*"
- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Microsoft\Edge\ExtensionInstallAllowlist] "1"="boainbfkaibcfobfdncejkcbmfcckljh"

## Installing PTF Chrome Recorder Extension

You may want to manually install the recorder extension when certain browser policies block the recorder extension.

To install PTF Chrome Recorder extension:

1. Close all the Chrome windows that already opened.
2. Open a new Chrome browser window as administrator.
3. Open the URL chrome://extensions/.
4. Enable the developer mode by clicking on the Developer mode toggle button.
5. Keep the Chrome window open and then navigate to the PTF installation directory.
6. Select the psTstRecCh.crx file. Next, drag and drop this file on the opened Chrome browser.

An alert box appears with the Add Extension button.

7. Add the extension. A confirmation message appears on the Chrome window.
8. Close the Chrome window, and start PTF to launch the Chrome Recorder.

## Uninstalling PTF Chrome Recorder Extension

You may have to uninstall old PTF Chrome Recorder extensions.

To uninstall:

1. Close all the Chrome browser windows that are already opened.
2. Open a new Chrome browser window as administrator.
3. Open the URL chrome://extensions/
4. Search for **PTF Recorder**, and click Remove.
5. A message 'Remove PTF recorder?' appears.
6. Click Remove, and then close the Chrome window.

## Installing PTF Microsoft Edge Recorder Extension

To install PTF Microsoft Edge Recorder extension:

1. Close all the Microsoft Edge windows that already opened.
2. Open a new Microsoft Edge browser window as administrator.

3. Open the URL `edge://extensions/`.
4. Enable the developer mode by clicking on the Developer mode toggle button.
5. Keep the Edge window open and then navigate to the PTF installation directory.
6. Select the `psTstRecCh.crx` file. Next, drag and drop this file on the opened Edge browser.  
An alert box appears with the Add Extension button.
7. Add the extension. A confirmation message appears on the Edge window.
8. Close the Edge window, and start PTF to launch the Edge Recorder.

## Uninstalling PTF Microsoft Edge Recorder Extension

You may have to uninstall old PTF Microsoft Edge Recorder extensions.

To uninstall:

1. Close all the Microsoft Edge browser windows that are already opened.
2. Open a new Microsoft Edge browser window as administrator.
3. Open the URL `edge://extensions/`
4. Search for **PTF Recorder**, and click Remove.
5. A message 'Remove the PTF recorder from Microsoft Edge?' appears.
6. Click Remove, and then close the Microsoft Edge window.

## Installing the PTF Client Software

The following options are available for installing the PTF Client:

- Installing from PeopleTools Client Deployment Packages (DPK).
- Installing in silent mode.

### Installing PTF from PeopleTools Client Deployment Packages (DPK)

PeopleTools Client deployment is documented in PeopleSoft PeopleTools Deployment Packages Installation guide, Task 2-12: Deploying the PeopleTools Client DPK.

Download the PeopleTools Deployment Packages Installation guide from PeopleSoft PeopleTools Home Page on My Oracle Support for the current PeopleSoft PeopleTools release.

For example, for PeopleTools release 8.59, download the DPK Installation guide from PeopleSoft PeopleTools 8.59 Home Page on My Oracle Support.

The directions here only refer to the PeopleSoft Test Framework portion.

When you deploy PeopleTools Client in standalone mode using (`SetupPTClient.bat -t`), you will be prompted whether or not to install PeopleSoft Test Framework.

Do you want to install PeopleSoft Test Framework? [Y/N] :

If you answer *y* (yes), specify the installation directory, or accept the default, C:\Program Files\PeopleSoft\PeopleSoft Test Framework:

```
Please specify the directory to install PeopleSoft Test Framework [C:\Program Files=>
\PeopleSoft\PeopleSoft Test Framework]:
```

If you enter a directory where a previous version of PeopleSoft Test Framework is installed, it will upgrade that version to the new PeopleTools release/patch.

Next, you will be prompted whether or not to configure PeopleSoft Test Framework.

```
Do you want to configure PeopleSoft Test Framework? [Y/N]: n
```

If you choose *y* (yes) to configure PTF, the deployment process prompts you for setup parameters. You can configure PTF either at the same time that you install it or later.

This example shows the setup parameters:

```
Database Name: HCM92
Server:Port: example.com:443
Node ID: node_name
User ID: VP1
Proxy [Y/N]: y
Proxy Server: proxyserver.com
Proxy Port: 5000
Proxy User: username
Proxy Password:*****
Retype Proxy Password:*****
```

You can even use the deployment process to re-configure PTF in cases where you do not need to re-install PTF.

See [Creating a Connection to a PTF Environment](#), for details on setup parameters.

**Note:** You can install PeopleSoft Test Framework as part of the PeopleTools Client deployment, or as a separate installation.

This example shows PTF installation using SetupPTClient.bat -t, and PTF is done as a separate installation as PeopleTools 8.58 Client is already deployed (first option is specified as *n*.)

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\abc>cd C:\dpk_858\909_client

C:\dpk_858\909_client>SetupPTClient.bat -t
***** SetupPTClient started at 7:23:01.88 *****

Do you want to deploy PeopleTools client? [Y/N]: n
Do you want to install Change Assistant? [Y/N]: n
Do you want to install Change Impact Analyzer? [Y/N]: n
Do you want to install PeopleSoft Test Framework? [Y/N]: y

Please specify the directory to install PeopleSoft Test Framework [C:\Program F
iles\PeopleSoft\PeopleSoft Test Framework]:
```

```
Do you want to configure PeopleSoft Test Framework? [Y/N]: n
```

```
Please specify the PSHOME for the PeopleTools Client [C:\PT8.58
_Client]:c:\pt8.58
```

```
Starting Tools Client Deployment!
Installing Peoplesoft Test Framework in C:\Program Files\PeopleSoft\PeopleSoft T
est Framework for PTools Version 8.58

Deployment of PeopleTools Client Complete.

Tools Client Deployment Ended.

***** SetupPTClient ended at 7:27:30.10 *****
Please review C:\users\abc\AppData\Local\Temp\PeopleSoft\PTClientDeploy.log
for additional information.

C:\dpk_858\909_client>
```

This setup will add the shortcut to the desktop.

## Installing PeopleSoft Test Framework in Silent Mode

You can carry out a silent installation of PeopleSoft Test Framework by supplying command-line parameters to a script.

With silent installation there is no user interaction after you begin the installation.

The PeopleSoft Test Framework installer includes the following files in the directory PS\_HOME\setup\PsTestFramework:

- setup.bat – Use this script to upgrade an existing PeopleSoft Test Framework instance or install a new instance.
- resp\_file.txt – This file provides the instructions for silent install.
- response-file.txt – This file provides the path to install PeopleSoft Test Framework.

To use the PeopleSoft Test Framework silent installation script:

1. In a command prompt, go to PS\_HOME\setup\PsTestFramework.

---

**Note:** Do not move the file to another location.

---

2. Run the following command:

```
setup.bat -f resp_file.txt -p <Path>
```

If <Path> is supplied, and it is valid, then PeopleSoft Test Framework will be installed in that location. If the path is not supplied or invalid, setup.bat will read the response-file.txt for the location.

---

**Warning!** Silent install deletes all content present in the <Path> location.

---

**Note:** You cannot configure using silent mode. After installing PTF using silent mode, open it, and configure.

To uninstall PTF:

1. In a command prompt, go to PS\_HOME\setup\PsTestFramework.

2. Run the following command:

```
setup.bat -u U
```

## Support for Browser Drivers in PTF

PTF supports downloading and using latest browser drivers that are compatible with the version of Chrome, Microsoft Edge, and Mozilla Firefox browsers so that you can use higher versions of these browser for test playback.

Chrome, Firefox (Gecko), and Microsoft Edge drivers are not shipped with PTF.

You can download the compatible driver version for the browser installed in your machine.

To download and use the required Chrome driver:

1. Download the required Chrome driver from <https://chromedriver.chromium.org/downloads>.
  - a. Select the Chrome driver release version. For example, *ChromeDriver 88.0.4324.27*.
  - b. Download the **chromedriver\_win32.zip** file.
2. Extract the zip file and copy the chromedriver.exe executable file to PTF install directory.
3. Rename the copied driver to match the existing Chrome driver naming format, which is `chromedriver_<version>.exe`, where *version* indicates the version that you select while downloading. For example, *chromedriver\_88.0.4324.27.exe*.

To download and use the required Firefox (Gecko) driver:

1. Download the required Firefox (Gecko) driver from <https://github.com/mozilla/geckodriver/releases>.
  - a. Select the Gecko driver release version. For example, *0.28.0*.
  - b. From the Assets section, download the **win64.zip** file. For example, *geckodriver-v0.28.0-win64.zip*.
2. Extract the zip file and copy the geckodriver.exe executable file to PTF install directory.
3. Rename the copied driver to match the existing Gecko driver naming format, which is `geckodriver_<version>.exe` where *version* indicates the version that you select while downloading. For example, *geckodriver\_0.28.0.exe*.

To download and use the required Microsoft Edge driver:

1. Download the required Microsoft Edge driver from <https://developer.microsoft.com/en-us/microsoft-edge/tools/webdriver/>.
  - a. On the Downloads section, select the required version. For example, *89.0.774.4*.
  - b. Download the edgedriver\_win32.zip file by choosing your operating system as *x86*.

2. Extract the zip file and copy the msedgedriver.exe executable file to PTF install directory.
3. Rename the copied driver to match the existing Microsoft Edge driver naming format, which is `msedgedriver _<version>.exe` where *version* indicates the version that you select while downloading. For example, `msedgedriver _89.0.774.4.exe`.

PTF checks for browser drivers at the time of login and alerts customer with a message if browser drivers are missing. The message also directs customers to the readme file available in the PTF installation folder, which has instructions to find and download the suitable browser driver.

## 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:

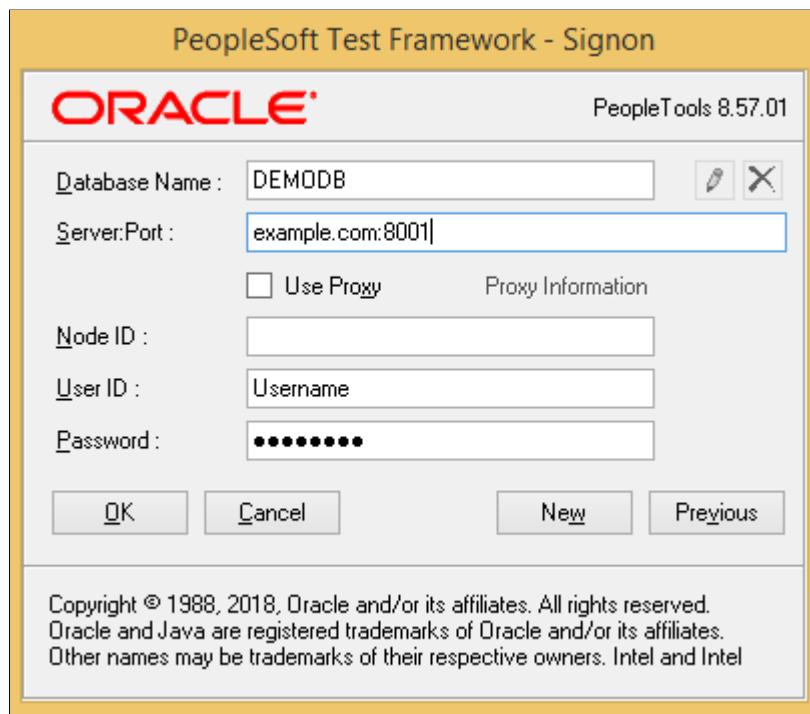
<b>Field or Control</b>	<b>Description</b>
<b>Database Name</b>	Enter a descriptive name for this environment. You can use any name.
<b>Server:Port</b>	<p>Enter the server name and port for the environment. Contact your Integration Broker administrator or system administrator for the correct values.</p> <p>The format for the <b>Server:Port</b> field is:</p> <p>&lt;machine_name&gt;:&lt;https_port&gt;</p> <p>For example:</p> <p>us.example.com:443</p> <p>If the https port is the default 443 the port is optional.</p> <p>You can also enter a complete https URL in this format:</p> <p><code>https://&lt;machine_name&gt;:&lt;https_port&gt;=&gt;/PSIGW/HttpListeningConnector</code></p> <p>For example:</p> <p><code>https://us.example.com:443/PSIGW/Ht=&gt;tpListeningConnector</code></p>

<b><i>Field or Control</i></b>	<b><i>Description</i></b>
<b>Use Proxy</b>	<p>Select this field if using a proxy server.</p> <p>When you select this check box the Proxy Information link is enabled.</p>
<b>Proxy Information</b>	<p>Click this link to enter details for the proxy server.</p> <p>Enter the following information for the proxy server:</p> <ul style="list-style-type: none"> <li>• <b>Server:</b> Enter the server name</li> <li>• <b>Port:</b> Enter the server port.</li> <li>• <b>User:</b> Enter the user ID for the proxy server.</li> </ul> <p>If you use network authentication, use the DOMAIN \USER format.</p> <ul style="list-style-type: none"> <li>• <b>Password:</b> Enter the password.</li> </ul>
<b>Node ID</b>	<p>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.</p> <p>Contact your Integration Broker administrator or system administrator for the correct values.</p> <p>See <a href="#">Verifying Integration Broker Setup</a>.</p>
<b>User</b>	<p>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.</p> <p>If this user ID does not have PTF access, you will receive a login error:</p> <p>See <a href="#">Setting Up Security</a>.</p>
<b>Password</b>	<p>Enter the password for this user.</p>

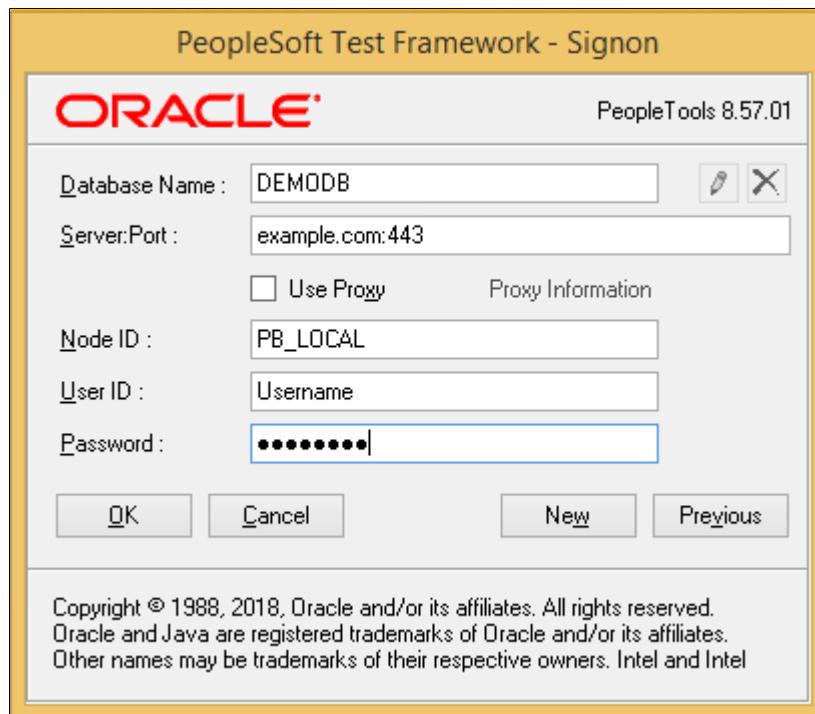
4. Click the **OK** button.

PTF launches with a connection to the designated environment.

This example illustrates a completed environment signon dialog box. In this example the Node ID field is left blank because the default gateway is used.



This example illustrates a PeopleSoft Test Framework - Signon dialog box where the default gateway is not used. This requires that the Node ID be specified:..



---

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

---

## Troubleshooting Tips

This section describes some of the errors you might encounter when attempting to log in to PTF and suggests possible solutions.

You will receive a login error if 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 specify the wrong HTTPS port in the environment login URL:

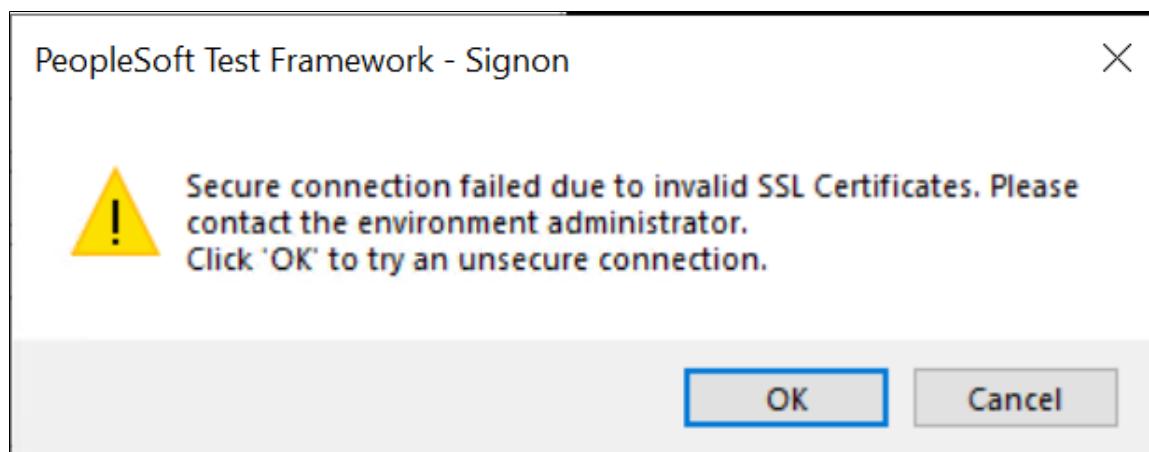
There was an error when PeopleSoft test Framework was trying to login.  
Please, check if the User ID and Password are correct.

```
ErrorMessage:Could not connect to https://example.com:442/PSIGW/HttpListeninConnector.  
TCP error code 10061: No connection could be made because the target machine actively  
refused it  
192.0.2.1:442  
ErrSource:mscorlib
```

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.

You will receive the following error message if you try to logon to an environment that is not secured with an SSL Certificate.

This example illustrates the error message received when trying to login to an unsecured environment.



PTF requires use of an HTTPS site for security purposes. Contact your PTF administrator to resolve this error.

## 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.

If you have created other environment logins, click the **Previous** button to select another environment login.

Click the **Edit** button to edit the currently selected environment login.

Environment login settings are specific to the machine on which the PTF client is installed. The environment login 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

To configure local options, access the Local Options dialog box (from the PTF menu, select Local Options).

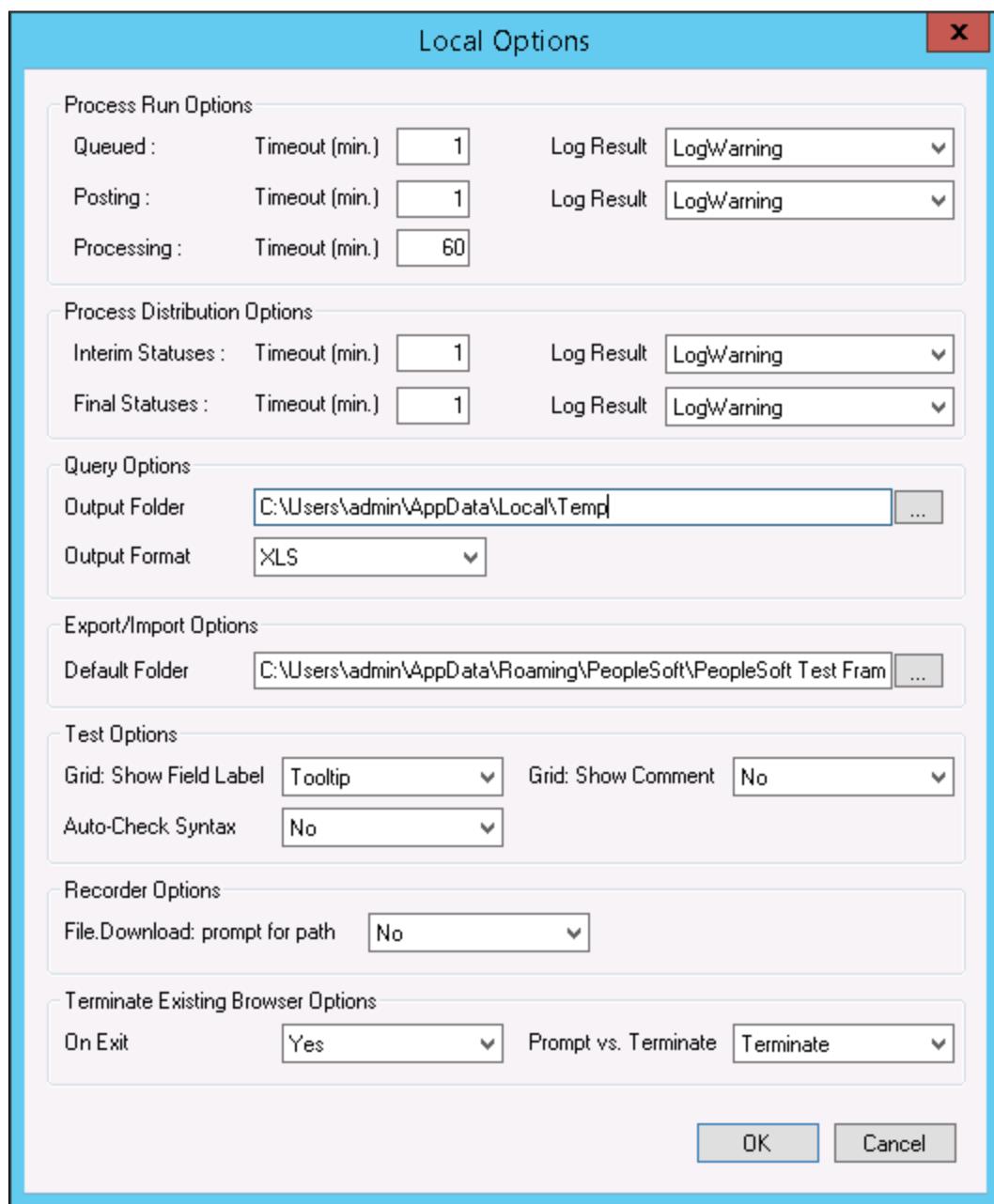
Local options are specific to the machine on which the PTF client is installed. The local options settings are stored in the localoptions.xml file in the PTF data directory (`C:\Documents and Settings\<User>\Application Data\PeopleSoft\PeopleSoft Test Framework`) by default.

---

**Note:** Changes made to the local options settings will take affect the *next* time you start the PTF client, or after a PTF test suite refresh.

---

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.



## Process Run Options

Term	Definition
<b>Queued: Timeout (min.)</b>	Enter the time in minutes for a process to be queued before PTF logs a warning or a fail message.

<b>Term</b>	<b>Definition</b>
<b>Queued: Log Result</b>	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 the run will stop if a timeout occurs.
<b>Posting: Timeout (min.)</b>	Enter the time in minutes for a process to post before PTF logs a warning or a fail message.
<b>Posting: Log Result</b>	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 the run will stop if a timeout occurs.
<b>Processing: Timeout (min.)</b>	Enter the time in minutes for a process to complete before PTF logs a warning or a fail message.

## Process Distribution Options

<b>Term</b>	<b>Definition</b>
<b>Interim Statuses: Timeout (min.)</b>	Enter the time in minutes, in which the process monitor matches the distribution_expected value for interim statuses, such as N/A, None, Generated, Posting.
<b>Interim Statuses: Log Result</b>	Specify whether a timeout causes PTF to log a warning or a fail message. If the status specified for distribution_expected is not matched then PTF logs a failed step.
<b>Final Statuses: Timeout (min.)</b>	Enter the time in minutes, in which the process monitor matches the distribution_expected value for final statuses, such as not Posted, or Posted.
<b>Final Statuses: Log Result</b>	Specify whether a timeout causes PTF to log a warning or a fail message.

## Query Options

<b>Term</b>	<b>Definition</b>
<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> .

## Export/Import Options

<b>Term</b>	<b>Definition</b>
<b>Default Folder</b>	Enter a default file path to save or retrieve the data file of the Runtime Options. You can set the default location only from the PTF client.  You can overwrite the path during the migration process too.

### Related Links

- [Exporting and Importing Runtime Options](#)
- [Exporting Runtime Options](#)
- [Importing Runtime Options](#)

## Test Options

<b>Term</b>	<b>Definition</b>
<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> step information according to actual data of the env which to be tested/under testing. If the option is not selected, then only missing step information is filled out 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>Term</b>	<b>Definition</b>
<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.

## Terminate Existing Browser Options

**Note:** Any change in this section of the Local Options dialog box will be effective after PTF client is restarted.

These options specify whether to check for active web driver processes when you exit the PTF client, and how to manage them. Multiple browsers are supported for test run via use of a web driver, which is a web

automation framework that enables test run against different browsers. To assist in debugging, users have the option of leaving the test run browser session open after test execution, using a toggle available on the PTF Debug menu. However, the web driver used for each open session consumes machine memory, until that browser session is closed. Make sure the drivers and their associated browser sessions are properly managed, to prevent performance issues. There are also related options for managing the web drivers and test execution browser sessions in the PTF Debug menu and Tools menu.

---

**Note:** In the PTF session if **Runtime Options** has *Chrome* specified as the browser then all open browser sessions including Chrome, Firefox, and Microsoft Edge opened from PTF will get closed.

If any other browser is specified then all the instances of the specific browser opened from PTF will be closed.

---

<b>Term</b>	<b>Definition</b>
<b>On Exit</b>	<p>Determines if PTF should automatically check for leftover active driver sessions when terminating the client.</p> <p>Options are:</p> <ul style="list-style-type: none"> <li>• <i>Yes</i>: Select this option to include a check for existing active driver processes when you terminate PTF. The value selected in the <b>Prompt vs. Terminate</b> field determines what action is taken.           <ul style="list-style-type: none"> <li>• If <i>Prompt</i> is selected, you are prompted to close existing browser windows.</li> <li>• If <i>Terminate</i> is selected all open browser windows will close without any prompt.</li> </ul> </li> <li>• <i>No</i>: PTF will not check for leftover sessions.</li> </ul> <p>You can check for active driver processes at any time by selecting Tools, Check/Stop Leftover Drivers from the PTF client menu.</p>
<b>Prompt vs. Terminate</b>	<p>The value selected in this field controls how PTF manages existing active web driver sessions. Options are:</p> <ul style="list-style-type: none"> <li>• <i>Prompt</i>: Select this option to view a dialog box that includes a count and list of the active driver processes, and a prompt asking if you want to terminate them. Choose Yes to terminate all active driver processes, No to leave them active, or Cancel to return to the Test Editor window.</li> <li>• <i>Terminate</i>: Select this option to automatically terminate all active driver processes. No prompt or preview of active driver processes appears when you select this option.</li> </ul>

---

**Note:** If the test includes steps to open new browser windows, set **On Exit** as *Yes* and **Prompt vs. Terminate** field as *Terminate* to avoid unexpected issues on the step Browser.WaitForNew.

---

## Configuring Runtime Options in PTF Client

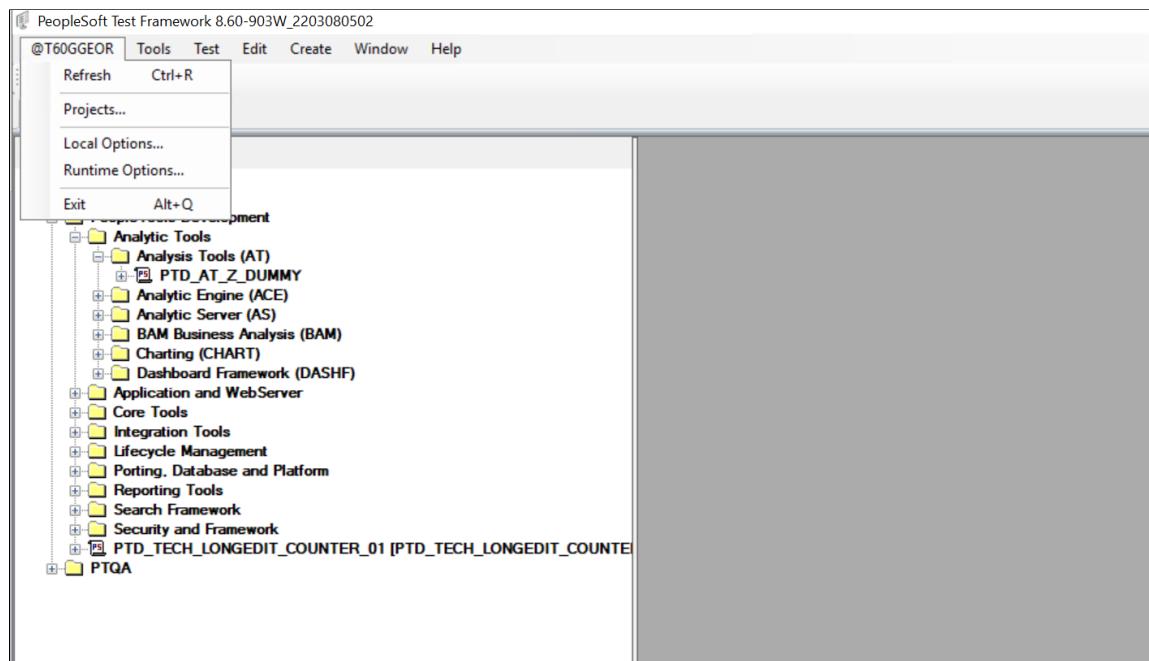
You use runtime options to configure settings for the PeopleSoft applications that you test with PTF. Runtime options are stored as part of the metadata for a PTF environment and are available to all users of that environment. Only a PTF administrator (a user with the PTF Administrator role) is able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

This section describes how to configure runtime options in the PTF Client. For information about defining runtime options in PIA, see [Configuring Runtime 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 runtime options to environments running against the same database where test assets are stored.

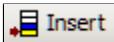
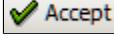
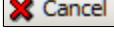
To establish runtime options in the PTF client, access the Runtime Options dialog (select <PTF menu>, Runtime Options). The PTF menu is labeled with the name of the current PTF environment, preceded by an @ character, such as @QEDMO. You can also access the Runtime Options dialog box by clicking the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

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



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

The following toolbar buttons are available:

<b>Field or Control</b>	<b>Description</b>
 <b>Insert</b>	Click to add a new runtime option.
 <b>Delete</b>	Click to remove an runtime option from the list.
 <b>Export</b>	Click to export runtime option on a PTF environment to a data file.
 <b>Import</b>	Click to import runtime options from a data file to a PTF environment.
 <b>Accept</b>	Click to save changes and close the dialog box.
 <b>Cancel</b>	Click to close the dialog box without saving changes.

## Default Runtime Option

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

## Overriding the Default Runtime Option

Use a Runtime step with a Set\_Options action in a shell test to override the default runtime option.

See [Runtime](#).

## Related Links

[Use Configuration and Runtime Options](#)

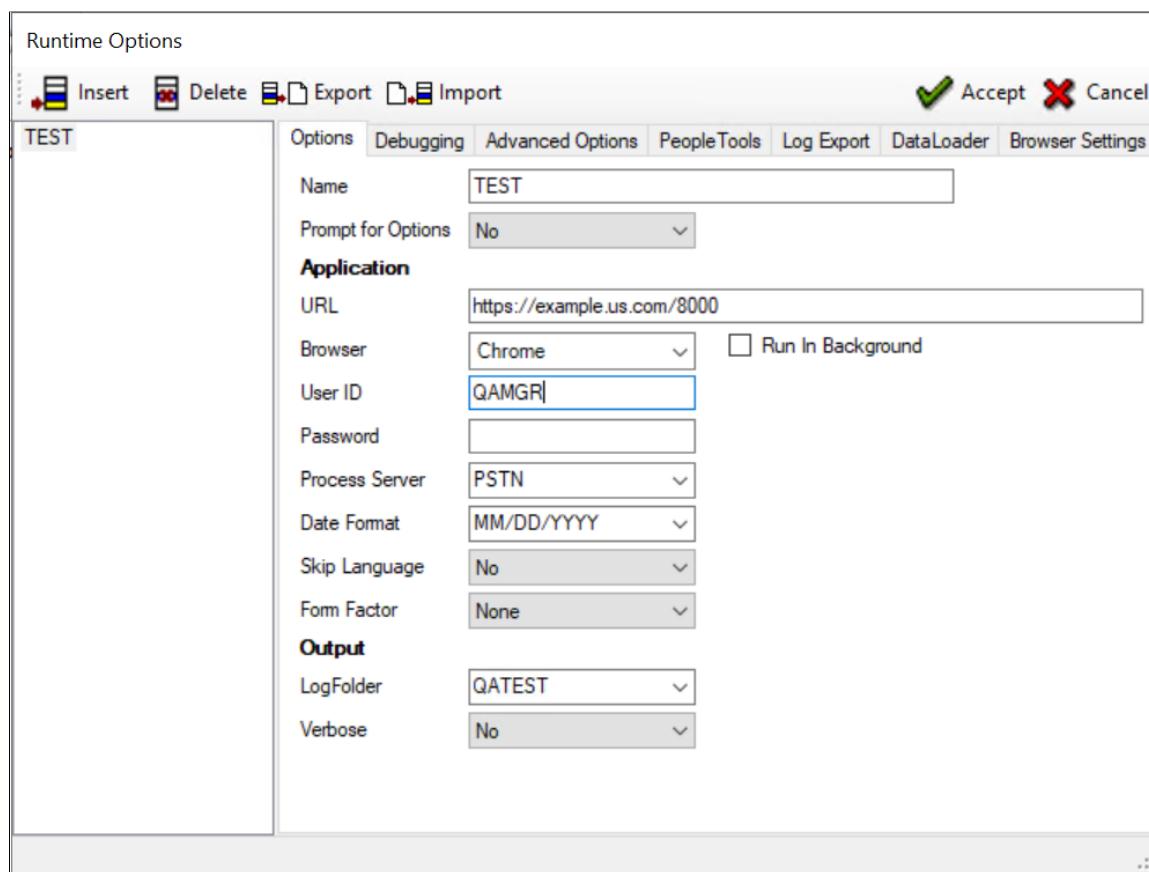
[Export/Import Options](#)

[Exporting and Importing Runtime Options](#)

## Options Tab

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

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



The following fields are on the Options tab:

<b>Term</b>	<b>Definition</b>
<b>Name</b>	Enter a name for this runtime option.
<b>Prompt for Options</b>	Specify whether the Runtime Options dialog appears when a user runs a test.
<b>URL</b>	<p>Enter the URL of the login page for the PeopleSoft application. PeopleSoft Test Framework uses this URL for the <code>Browser.Start_Login</code> step type/action when running tests and when you click the Home icon (to start the web client and go to the default URL) in the test recorder.</p> <p>If the URL that is specified is not a standard PeopleSoft login page, PeopleSoft Test Framework will try to determine the UserID and Password fields, and set their values accordingly. If that fails, PeopleSoft Test Framework will log a fatal error message. In that case you should use <code>Browser.Start</code> and the explicit steps required to log in, instead of using <code>Browser.Start_Login</code>.</p>

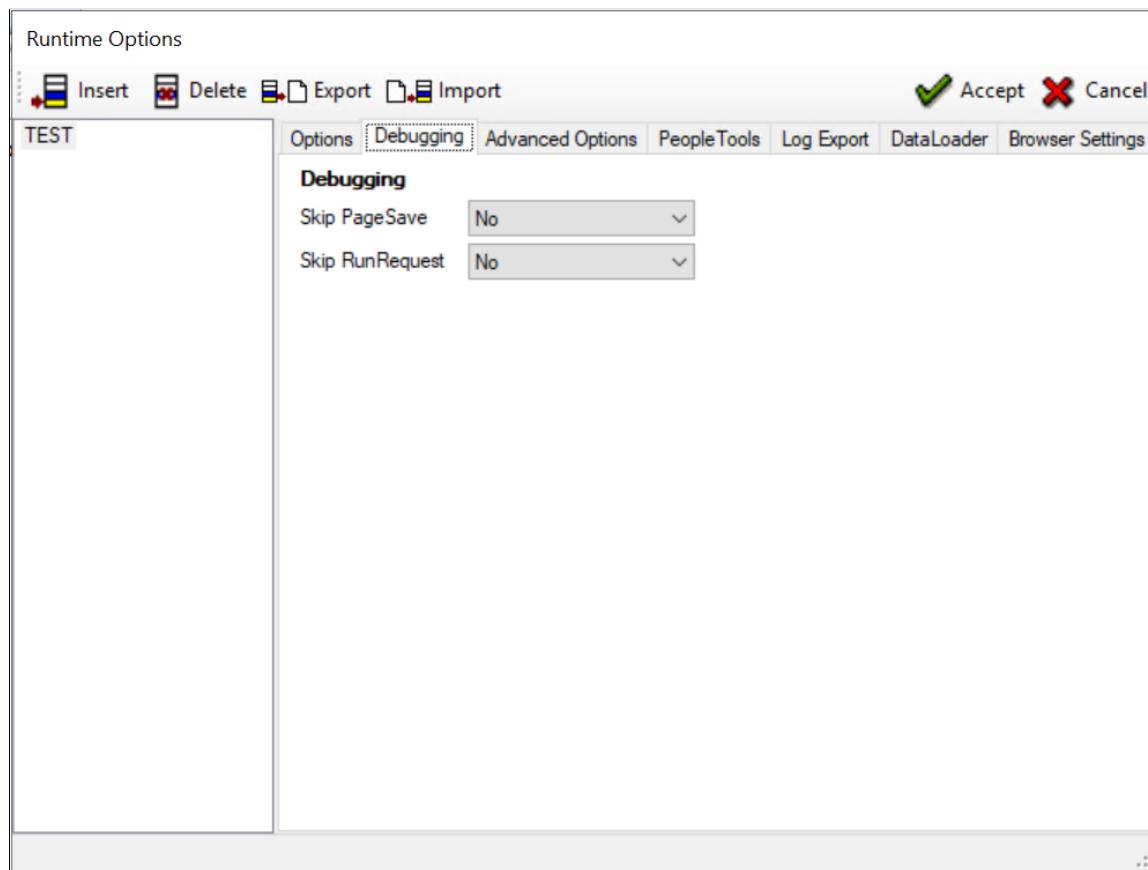
<b>Term</b>	<b>Definition</b>
<b>Browser</b>	<p>Specify a browser to record or playback any test script. The options are <i>Chrome</i>, <i>Microsoft Edge</i>, and <i>Firefox</i>. For test playback, you can use all these options.</p> <p>For recording test script, PTF is designed in such a way that it launches:</p> <ul style="list-style-type: none"> <li>• Chrome-based PTF recorder, if you select Chrome as the browser.</li> <li>• Microsoft Edge-based recorder, if you select Microsoft Edge as the browser.</li> </ul> <p>Chrome is the default value for browser. If you continue with the default value, the recording and test playback will happen in Chrome.</p>
<b>Run In Background</b>	<p>This option is enabled for Chrome and Microsoft Edge browsers to run it in headless mode.</p> <p>Select this option to run the browser window in the background so that the log viewer of PTF client is in the foreground for the user to monitor the test status.</p> <p>You can also set this option through command line.</p> <p>See <a href="#">Configuring Runtime Options from the Command Line</a>.</p>
<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>	<p>Select a process server from the drop-down list. This list is populated by the <b>Process Server List</b> field in the Configuration Options page.</p> <p>See <a href="#">Defining PTF Configuration Options</a>.</p>
<b>Date Format</b>	Select a date format.
<b>Skip Language</b>	Select <i>Yes</i> to bypass the language selection on the PeopleSoft application login page.
<b>Form Factor</b>	<p>Select the form factor size to use when launching the application.</p> <p>At test runtime, 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.</p>

<b>Term</b>	<b>Definition</b>
<b>LogFolder</b>	Select or enter the folder name to which test logs will be written. If the folder does not exist it will be created.
<b>Verbose</b>	<p>Specify the log format.</p> <p>Select <i>Yes</i> to log a detail line for each step that is executed in the test.</p> <p>Select <i>No</i> to log only the test status (Pass or Fail) at the test level and to log a detail line for failed steps.</p>

## Debugging Tab

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

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



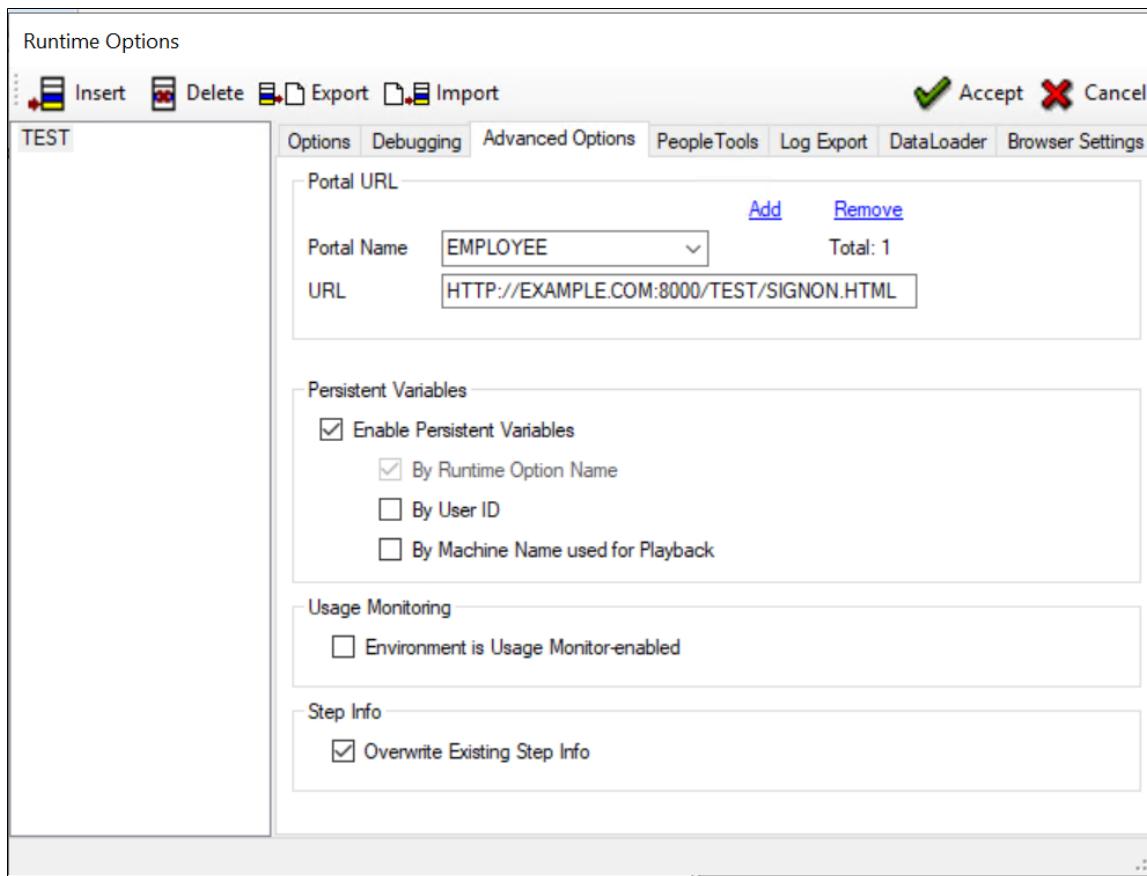
The following fields are on the Debugging tab:

<b>Term</b>	<b>Definition</b>
<b>Skip PageSave</b>	Select <i>Yes</i> to prevent a test from running 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.
<b>Skip RunRequest</b>	Select <i>Yes</i> to prevent the test from running 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.

This example illustrates the fields and controls on the Runtime 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:

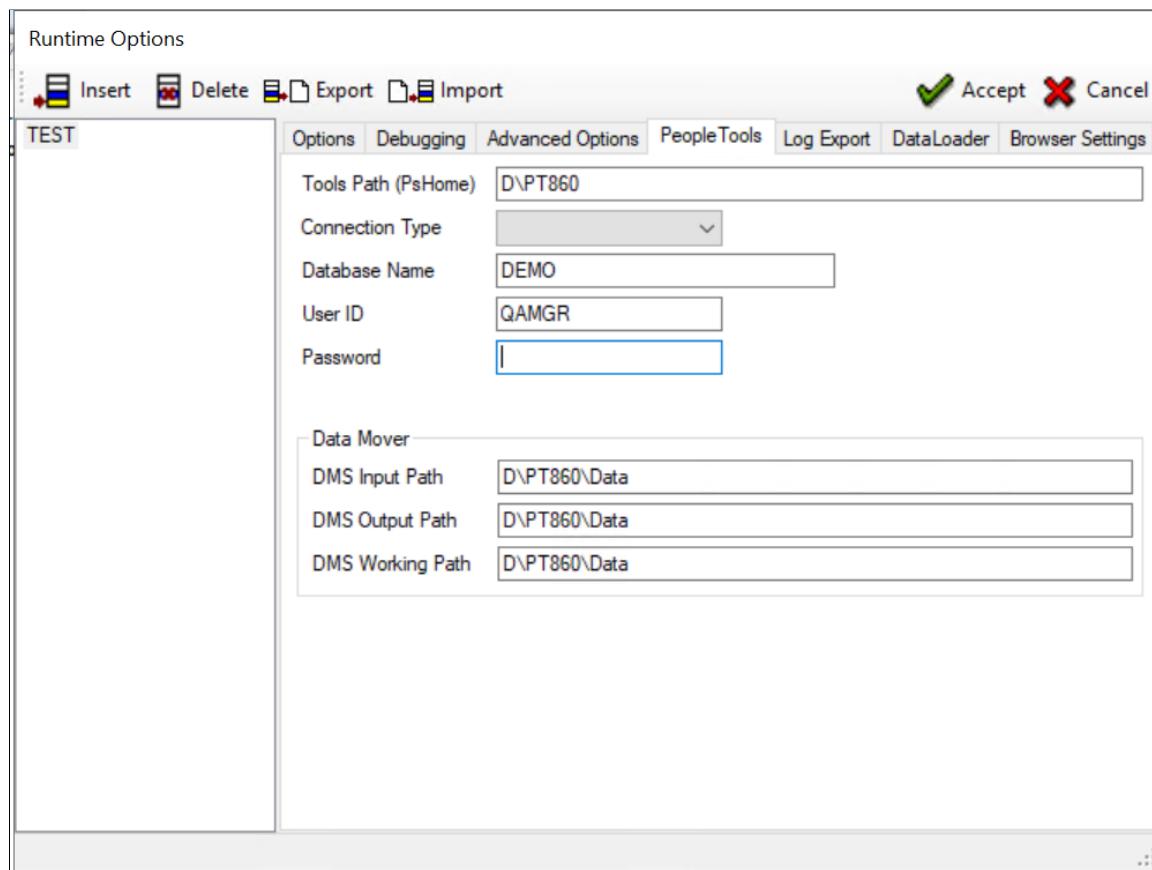
<b>Term</b>	<b>Definition</b>
<b>Add and Remove</b>	Click to add or remove a Portal definition, then complete the <b>Portal Name</b> and <b>URL</b> fields.
<b>Portal Name</b>	<p>Enter a valid portal name or select from a list of previously added portal names.</p> <p><b>Note:</b> The name is saved in upper case.</p>
<b>URL</b>	<p>Enter the portal URL.</p> <p>The portal URL is entered in the following format:</p> <pre>http://webserver/psp/domain/portalname/n⇒ode</pre> <p>For example: http://myserver.example.com:8010/ps/EMPLOYEE/QE_LOCAL/</p> <p><b>Note:</b> The ending backslash / is optional</p>
<b>Enable Persistent Variables</b>	<p>Select to enable saving and using persistent variables. Selecting this option enables the other fields in this group.</p> <p>See <a href="#">Using Persistent Variables</a></p>
<b>By Runtime Option Name</b>	This option is automatically selected when you select the Enable Persistent Variables check box. Persistent variables are stored in the database keyed by runtime option name. Persistent variables can also be keyed by User ID, machine name or both.
<b>By User ID</b>	Select to store and retrieve persistent variables by PTF user ID.
<b>By Machine Name Used for Playback</b>	Select to store and retrieve persistent variables by machine name.

<b><i>Term</i></b>	<b><i>Definition</i></b>
<b>Environment is Usage Monitor-enabled</b>	<p>Select this option to enable managed object tracking with usage monitor during test runtime. When this option is selected, PTF passes the test and test case values as parameters to the usage monitor during test runtime when it encounters the Usage Monitor step type.</p> <p>When this option is not selected, if a test includes a Usage Monitor step type, then PeopleSoft Test Framework writes a warning to the log and skips the step. This enables you to run a test on environments with and without usage monitor enabled, without having to modify the test between runtime.</p> <hr/> <p><b>Note:</b> The PeopleSoft application must be properly configured for Usage Monitor if you select this option.</p> <hr/> <p>For more information about configuring Usage Monitor, see “Enabling Usage Monitor” (Usage Monitor).</p> <p>For more information about the Usage Monitor step type, see <a href="#">UsageMonitor</a>.</p>
<b>Overwrite Existing Step Info</b>	<p>Select the option <b>Overwrite Existing Step Info</b> which will allow PeopleSoft Test Framework to update step information according to actual data of completed or ongoing tests from the environment. If the option is not selected, then only the missing step information is filled out.</p> <p>For more information on Step Information, see <a href="#">Using Step Information</a>.</p>

## PeopleTools Tab

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

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



The following fields are on the PeopleTools tab:

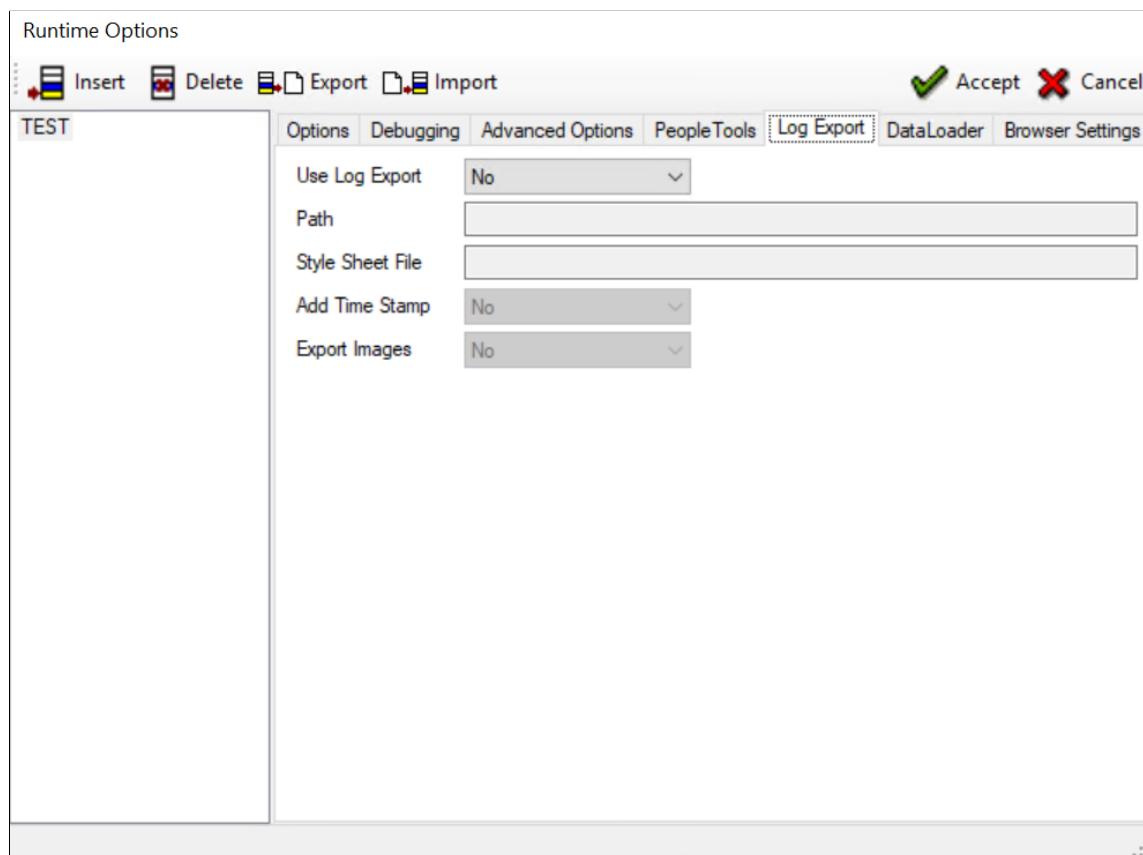
<b>Term</b>	<b>Definition</b>
<b>Tools Path (PsHome)</b>	Enter the path to PS_HOME for this environment.
<b>Connection Type</b>	Select the connection type.
<b>Database Name</b>	Enter the name of the database for this environment.
<b>User ID</b>	Enter a valid database user ID.
<b>Password</b>	Enter the password for this user.
<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.

## 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 runtime, 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.

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



<b>Term</b>	<b>Definition</b>
Use Export Log	Select Yes to activate the export log functionality.
Path	<p>Specify the shared drive to store the log files.</p> <p><b>Note:</b> Ensure that the shared drive path allows users full read/write access. The path can be customized using existing system variables. See <a href="#">System Variables</a></p>

<b>Term</b>	<b>Definition</b>
Style Sheet File	<p>(Optional) Specify the path to the stylesheet. If specified, the exported XML log will be saved with the stylesheet.</p> <p>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.</p> <p><b>Note:</b> Ensure that the shared drive path allows users full read/write access. The path can be customized using existing system variables. See <a href="#">System Variables</a></p>
Add Time Stamp	<p>If set to <i>Yes</i> the XML filename will be appended with the Time Stamp in the following format:</p> <pre>&lt;TEST_NAME&gt;-&lt;LOG_ID&gt;-T&lt;YYYYMMDD&gt;_ &lt;HHMMSS&gt;</pre> <p>Example: FSCM_INS_VER-LOG5-T20121128_163649.XML</p>
Export Images	<p>If set to <i>Yes</i> the Image will be saved in the same Log folder as the XML Log in the following format:</p> <pre>&lt;TEST_NAME&gt;-&lt;LOG_ID&gt;-T&lt;OPTIONAL_TIME_STAMP&gt;-&lt;LINE_NUMBER_AS_SHOWN_IN_LOG&gt;</pre> <p>Example: FSCM_INS_VER-LOG5-T20121128_163649-Line30.JPG</p>

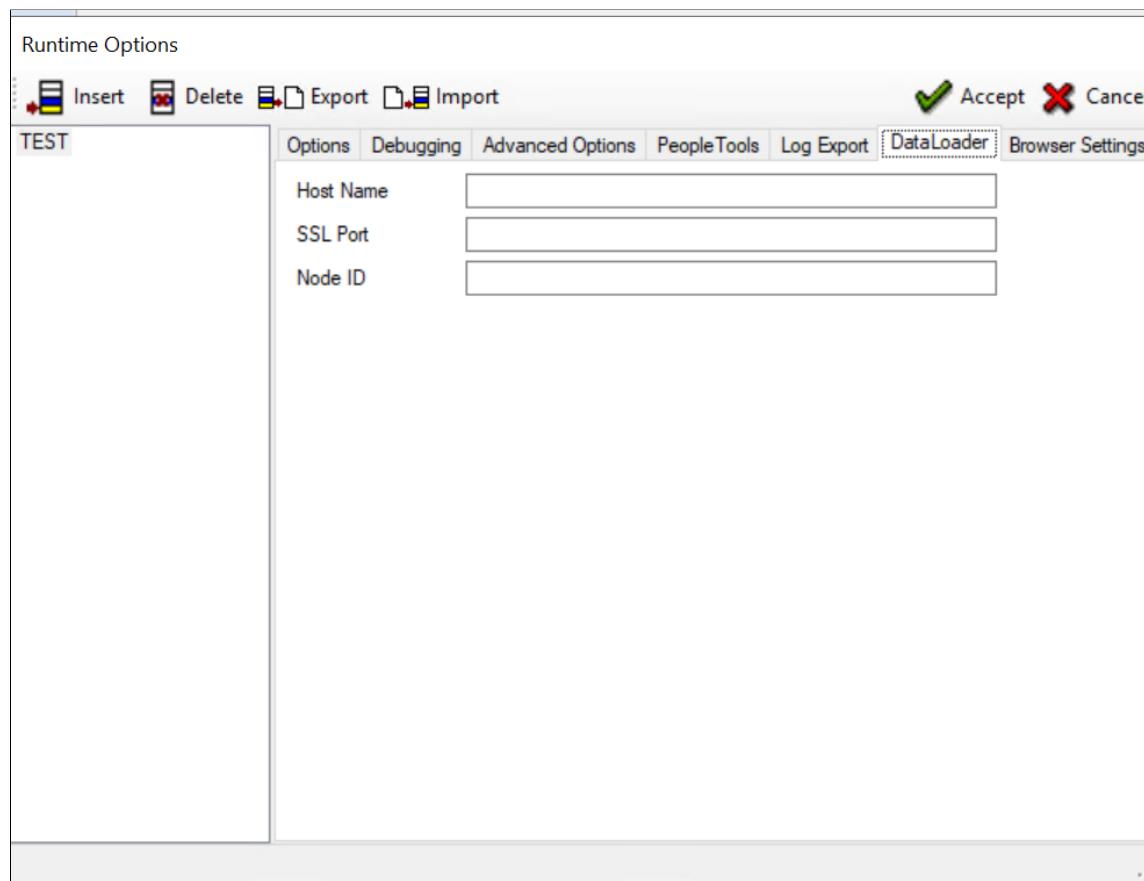
This example illustrates an exported log file using customized stylesheet.

The screenshot shows the PTF Runtime Log window. The title bar reads "PTF LOG - PAGETITLE\_FSCM...". The main area is titled "PTF RUNTIME LOG". A sidebar on the left contains sections for "Log Info", "Runtime Options", "System Info", "PTF Environment Info", and "Step-wise Log Info". The "Log Info" section has "Expand All" and "Collapse All" buttons. The log itself shows a sequence of messages, starting with "Message: Test Start: 5/24/2022 4:48:11 AM" and ending with "Message: Test End: 5/24/2022 4:50:29 AM". The log details various interactions such as navigating to a URL, setting values in input fields, clicking buttons, and performing searches. The status bar at the bottom right indicates an "Overall Result: Pass".

## DataLoader Tab

Use the DataLoader tab to enter configurations information similar to PTF login screen.

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



<b>Term</b>	<b>Definition</b>
Host Name	Enter the deployment host name.
SSL Port	Enter the SSL port of the server in the current Runtime Options.
Node ID	<p>Enter the node ID added to the current Runtime Options.</p> <p>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.</p> <p>Contact your Integration Broker administrator or system administrator for the correct values.</p> <p>See <a href="#">Verifying Integration Broker Setup</a>.</p>

---

## Configuring Runtime Options in PeopleSoft Internet Architecture

You use runtime options to configure settings for the PeopleSoft applications that you test with PTF. Runtime 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 runtime options. You can configure runtime options either in the PTF client, or by using the Define Runtime Options component in the PeopleSoft Internet Architecture.

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

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

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

### Specifying Runtime Options

Use the Define Runtime Options (PSPTTSTEXEOPTIONS) page to define PTF options for running tests.

Navigation:

**PeopleTools > Lifecycle Tools > Test Framework > PTF Runtime Options**

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

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

The screenshot shows the 'Define Runtime Options' page with the following settings:

- Name:** TEST
- \*Prompt:** No
- Application URL:** http://example.us.oracle.com:8000/t60ggeorx/signon.html
- Browser:** Chrome
- Run In Background:** checked
- User ID:** QEDMO
- Password:** Password cannot be modified in PIA. It can only be modified from the Test Framework client.
- Process Server:** PSNT
- \*Date Format:** MM/DD/YYYY
- Skip Language:** No
- Form Factor:** None
- Log Folder:** (empty)
- \*Verbose:** No

Buttons at the bottom:

- Save
- Return to Search

The fields on the Define Runtime 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>Field or Control</b>	<b>Description</b>
<b>Prompt</b>	Specify whether the Runtime Options dialog appears when a user runs a test.
<b>Application URL</b>	Enter the URL of the login page for the PeopleSoft application. PeopleSoft Test Framework uses this URL for the Browser.Start_Login step type/action when running tests and when you click the Home icon (to start the web client and go to the default URL) in the test recorder.

<b>Field or Control</b>	<b>Description</b>
<b>Browser</b>	<p>The options are <i>Chrome</i>, <i>Microsoft Edge</i>, and <i>Firefox</i>.</p> <p>For test playback, you can use all these options.</p> <p>For recording test script, PTF is designed in such a way that it launches:</p> <ul style="list-style-type: none"> <li>• Chrome-based PTF recorder, if you select Chrome as the browser.</li> <li>• Microsoft Edge-based recorder, if you select Microsoft Edge as the browser.</li> </ul> <p>Chrome is the default value for browser. If you continue with the default value, the recording and test playback will happen in Chrome.</p>
<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 Runtime Options dialog in the PTF client. For more information, see <a href="#">Configuring Runtime Options in PTF Client</a>
<b>Process Server</b>	Select a process server from the drop-down list. This list is populated by the <b>Process Server List</b> 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 PeopleSoft application login page.
<b>Form Factor</b>	Select the form factor size to use when launching the application.
<b>Log Folder</b>	Select or enter the folder name to which test logs will be written. If the folder does not exist it will be created.
<b>Verbose</b>	<p>Specify the log format.</p> <p>Select <i>Yes</i> to log a detail line for each step that is executed in the test.</p> <p>Select <i>No</i> to log only the test status (Pass or Fail) at the test level and to log a detail line for failed steps.</p>

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

## Configuring Debugging Options

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

Navigation:

**PeopleTools > Lifecycle Tools > Test Framework > PTF Runtime Options**

Select the Debugging Options tab.

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

<b>Field or Control</b>	<b>Description</b>
Skip Save	Select Yes to prevent a test from running 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 running process requests.

## Defining Advanced Options

Use the Define Runtime Options - Advanced Options page (PSPTTSTADVOPTIONS) 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 > PTF Runtime Options**

Select the Advanced Options tab.

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

The screenshot shows the 'Advanced Options' tab selected in the top navigation bar. The main content area contains several configuration sections:

- Portal URL:** A table with columns for \*Portal Name and URL. It shows one entry: EMPLOYEE with URL http://example.us.oracle.com:8000/psp/ps/EMPLOYEE. Buttons for adding (+) and deleting (-) rows are available.
- Persistent Variables:** A section with a checkbox for 'Use Persistent Variables' and three sub-options: 'By Runtime Option Name', 'By User ID', and 'By Machine Name'. The 'By Runtime Option Name' option is selected.
- Usage Monitoring:** A section with a checkbox for 'Enable Usage Monitor'. The 'Enable Usage Monitor' option is not selected.
- Step Info:** A section with a checked checkbox for 'Overwrite Step Info'.

At the bottom are two buttons: 'Save' and 'Return to Search'.

<b>Field or Control</b>	<b>Description</b>
<b>Portal Name</b>	<p>Enter a portal name.</p> <p><b>Note:</b> The name is saved in upper case.</p>
<b>URL</b>	<p>Enter the portal URL.</p> <p>The portal URL is entered in the following format: http://webserver/psp/domain/portalname/node For example: http://myserver.example.com:8010/psp/ps/EMPLOYEE/QE_LOCAL/</p> <p><b>Note:</b> The ending backslash / is optional</p>

<b>Field or Control</b>	<b>Description</b>
<b>Use Persistent Variables</b>	Select to enable saving and using persistent variables. Selecting this option enables the other fields in this group.
<b>By Runtime Option Name</b>	This option is automatically selected when you select the <b>Use Persistent Variables</b> check box. Persistent variables are stored in the database keyed by runtime option name. Persistent variables can also be keyed by User ID, machine name or both.
<b>By User ID</b>	Select to store and retrieve persistent variables by PTF user ID.
<b>By Machine Name</b>	Select to store and retrieve persistent variables by machine name.
<b>Enable Usage Monitor</b>	<p>Select this option to enable managed object tracking with usage monitor during test runtime. When this option is selected, PTF passes the test and test case values as parameters to the usage monitor during test runtime when it encounters the Usage Monitor step type.</p> <hr/> <p><b>Note:</b> The PeopleSoft application must be properly configured for Usage Monitor if you select this option.</p> <hr/> <p>For more information about configuring Usage Monitor, see “Enabling Usage Monitor” (Usage Monitor).</p> <p>For more information about configuring Usage Monitor, see “Enabling Usage Monitor” (Usage Monitor).</p>
<b>Overwrite Step Info</b>	<p>Select the option <b>Overwrite Step Info</b> which will allow PeopleSoft Test Framework to update incorrect step information when a test encounters a failed step. If the option is not selected, then only missing steps are added.</p> <p>For more information on Step Information, see <a href="#">Using Step Information</a>.</p>

## Specifying PeopleTools Options

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

Navigation:

**PeopleTools > Lifecycle Tools > Test Framework > PTF Runtime Options**

Select the PeopleTools tab.

This example shows the Define Runtime Options - PeopleTools page:

This example illustrates the fields and controls on the Define Runtime 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.

<b>Field or Control</b>	<b>Description</b>
<b>Tools Path</b>	Enter the path to PS_HOME for this environment.
<b>Connection Type</b>	Select the connection type.
<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 Runtime Options - Export Log page (PSPTTSTLOGOPTIONS) to automatically archive the result logs to a file system in XML + XSL format at the completion 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 Runtime options**

Select the Export Log tab.

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

The screenshot shows the 'Define Runtime Options - Export Log' page. At the top, there is a navigation bar with tabs: Options, Debugging, Advanced Options, PeopleTools, **Export Log**, DataLoader, and Browser Settings. Below the navigation bar, there is a section labeled 'Name' with the value 'TEST'. Underneath this, there are several configuration options:

- 'Use Log Export' dropdown set to 'Yes'
- 'Path' input field containing 'D:\ptflog\testpath\test'
- 'Style Sheet File' input field containing 'D:\ptflog\TestLogStyle.xsl'
- 'Add Time Stamp' dropdown set to 'Yes'
- 'Export Images' dropdown set to 'No'

At the bottom of the page are two buttons: 'Save' and 'Return to Search'.

<b>Field or Control</b>	<b>Description</b>
Use Log Export	Select Yes to activate the export log functionality.

<b>Field or Control</b>	<b>Description</b>
<b>Path</b>	<p>Specify the shared drive to store the log files.</p> <p><b>Note:</b> Ensure that the shared drive path allows users full read/write access. The path can be customized using existing system variables. See <a href="#">System Variables</a></p>
<b>Style Sheet File</b>	<p>(Optional) Specify the path to the stylesheet. If specified, the exported XML log will be saved with the stylesheet.</p> <p>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.</p>
<b>Add Time Stamp</b>	<p>If set to <i>Yes</i> the XML filename will be appended with the Time Stamp in the following format:</p> <p>&lt;TEST_NAME&gt;-&lt;LOG_ID&gt;-T&lt;YYYYMMDD&gt;_&lt;HHMMSS&gt;</p> <p>Example: FSCM_INS_VER-LOG5-T20121128_163649.XML</p>
<b>Export Images</b>	<p>If set to <i>Yes</i> the Image will be saved in the same Log folder as the XML Log in the following format:</p> <p>&lt;TEST_NAME&gt;-&lt;LOG_ID&gt;-T&lt;OPTIONAL_TIME_STAMP&gt;-&lt;LINE_NUMBER_AS_SHOWN_IN_LOG&gt;</p> <p>Example: FSCM_INS_VER-LOG5-T20121128_163649-Line30.JPG</p>

## Specify DataLoader Options

Use the DataLoader page to enter configurations information of the SSL port.

This example illustrates the fields and controls on the Runtime Options page - DataLoader page. You can find definitions for the fields and controls later on this page.

The screenshot shows a web-based configuration interface. At the top, there is a horizontal navigation bar with tabs: Options, Debugging, Advanced Options, PeopleTools, Export Log, **DataLoader**, and Browser Settings. The 'DataLoader' tab is currently selected. Below the navigation bar, there is a form area. In the top left of the form area, the word 'Name' is followed by the value 'TEST' in a bold font. Below this, there are three input fields: 'Host Name' (empty), 'SSL Port' (empty), and 'Node ID' (empty). At the bottom of the form area, there are two buttons: a yellow 'Save' button with a disk icon and a yellow 'Return to Search' button with a magnifying glass icon.

<b>Term</b>	<b>Definition</b>
Host Name	Enter the deployment host name.
SSL Port	Enter the SSL port of the server in the current Runtime Options.
Node ID	<p>Enter the node ID added to the current Runtime Options.</p> <p>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.</p> <p>Contact your Integration Broker administrator or system administrator for the correct values.</p> <p>See <a href="#">Verifying Integration Broker Setup</a>.</p>

## Configuring Runtime Options from the Command Line

You can create, export, import, and overwrite an existing runtime option from the command line.

## Creating Runtime Options

You can configure new runtime options through the command line. To do this you will need to create a response file.

A response file is a text file with parameters. It is a secured way to pass parameters to the command line while creating runtime options.

Create a response file for example, c:\resp\_file.txt with the parameters described further. Then run **PsTestFw "C:\resp\_file.txt"** to create an runtime option.

If validation fails, the runtime options are not created.

PeopleSoft Test Framework provides a template to generate a response file. The response file template includes the following:

<b>Parameters</b>	<b>Description</b>
-CS	Server:Port
-CO	User name
-CP	Password
-CNO	(Optional) Node name
-CUA	(Optional) Action on the SSL error. Values are: <ul style="list-style-type: none"> <li>• True— Continue with unsecured connection.</li> <li>• False— Cancel the login.</li> </ul>
-Action	Runtime option migration type. Values are: <ul style="list-style-type: none"> <li>• <i>rtoimp</i> for importing runtime options.</li> <li>• <i>rtoexp</i> for exporting runtime options.</li> <li>• <i>rtoGen</i> for generating runtime options.</li> <li>• <i>testrun</i> for running a test.</li> </ul>
-Log	(Optional) Specify the name for the test runtime log. The default is <i>unattended.log</i> .

The following table describes the parameters to create runtime options, included in the response file.

<b>Parameters</b>	<b>Descriptions</b>
EXECOPTNAME	<p>Name of runtime options</p> <p>Note that:</p> <ul style="list-style-type: none"> <li>• It is a required field.</li> <li>• Do not use special characters such as: “&amp;”, “\”, “*”, “&lt;”, “?”.</li> </ul>
URL	<p>URL</p> <p>(Optional) It cannot be validated like the URL configured in the PTF client.</p>
TOOLSPATH DMSINPUT DMSOUTPUT DMSWORKING LOGEXPPATH	<p>File paths</p> <p>(Optional) PTF checks for special characters in the file path such as: “ ”, “&lt;”, “*”, “?”</p>
PERSISTVARIABLES	<p>If value is set to Yes, then following parameters are also required.</p> <p>BYEONAME BYUSERID BYMACHINE</p>
BROWSER	<p>Browser type where values can be:</p> <ul style="list-style-type: none"> <li>• Chrome</li> <li>• Firefox</li> <li>• Microsoft Edge</li> </ul>
NOWINDOW	<p>Set the value to Yes (Y) to enable the Run In Background option.</p> <p><b>Note:</b> Use this parameter only if you have selected the Chrome or Microsoft Edge browser.</p>

<b>Parameters</b>	<b>Descriptions</b>
FORMFACTOR	Form factor type where values can be: <ul style="list-style-type: none"> <li>• L</li> <li>• M</li> <li>• N</li> <li>• S</li> <li>• X</li> </ul>
PROMPT SKIPLANGUAGE VERBOSE SKIPPAGESAVE SKIPRUNREQUEST LOGEXPUSE LOGEXPDTTMSTAMP LOGEXPIMAGE	These parameters accept <i>Yes</i> or <i>No</i> values.

Here is an example of a response file.

```
# Specify the server:port to connect to.
-CS=example.us.abc.com:8001
# Specify the user name
-CO=XY
# Specify the user password
-CP=XY
# Specify the node name
-CNO=
# Please keep this item as it is
-ACTION=rtojen
#Specify action of SSL error
-CUA=
# Specify the file path of runtime options creation log
-LOG=eo-create.log
# Following items are the fields of runtime options.
# The field EXECOPTNAME is required.
[EXECOPT]
EXECOPTNAME=TESTNK
PROMPT= No
URL=http://example.us.abc.com:8000/h92vknewx/signon.html
BROWSER= Chrome
USER=XY
PASSWORD=XY
VERBOSE= No
NOWINDOW= Y

# Add multiple instances of the runtime options
PORTAL_NAME_1= CUSTOMER
PORTAL_VALUE_1= http://example.com:8000/psp/database/CUSTOMER/FSCM/
PORTAL_NAME_2= EMPLOYEE
PORTAL_VALUE_2= http://example.com:8000/psp/database/EMPLOYEE/ERP/
```

---

**Note:** To define multiple instances of runtime options settings, suffix an index for each runtime options instance. Specify the instance with the parameters *PORTAL\_NAME* and *PORTAL\_VALUE*.

---

## Exporting Runtime Options

You can export runtime options using command line. Enter **PsTestFw "C:\export\_exo.txt"** where *export\_exo.txt* is the response file. The response file will have following parameters:

<b>Parameters</b>	<b>Description</b>
-CS	Server:Port
-CNO	Node name
-CO	User name
-CP	Password
-CUA	(Optional) Specify the action of SSL error. Values are: <ul style="list-style-type: none"> <li>• True- Continue with the unsecured connection.</li> <li>• False- Cancel the login.</li> </ul>
-ACTION	Specify the migration type. For exporting runtime options enter <i>rtoexp</i>
-RTO	Specifies the name of the runtime option, which is exported. Add a comma; multiple runtime options can be selected.
-FILEPATH	Specifies the location and the file name where the runtime option data file is stored. For example C:\PsTestFrameWork\eo-export.dat.

Here is an example of the response file for exporting runtime options:

```
-CS=<Server>
-CNO=<Nodeid>
-CO=<username>
-CP=<ConnectionPassword>
-ACTION=rtoexp
-RTO=LOCAL
-FILEPATH=<Path & exporting file name>
```

On successful creation of the export file for the runtime options, a log file with the name *unattended.log* is also created under the export folder. The location of the export folder is specified in the Local Options dialog box. See [Export/Import Options](#).

## Importing Runtime Options

You can import runtime options from a data file to a database. The response file which is used to import the runtime options include server name, node name, user name, password, instances of runtime options to import, and the file path where the data file is located. See [Exporting Runtime Options](#).

### Overwrite Parameter

The overwrite parameter allows overwrite of runtime options with same name.

<b>Field or Control</b>	<b>Description</b>
-OVW	Y/N

A sample response file for importing runtime options and over writing existing runtime option is as follows:

```
-CS=<Server>
-CNO=<Nodeid>
-CO=<username>
-CP=<ConnectionPassword>
-ACTION=rtoimp
#Over write existitng runtime option with same name.
-OVW=Y
-FILEPATH=<Path & importing file name>
-LOG= c:\temp\eo-import.log
```

### Related Links

[Exporting and Importing Runtime Options](#)

[Configuring Runtime Options in PeopleSoft Internet Architecture](#)

[Configuring Runtime Options in PTF Client](#)

## Exporting and Importing Runtime Options

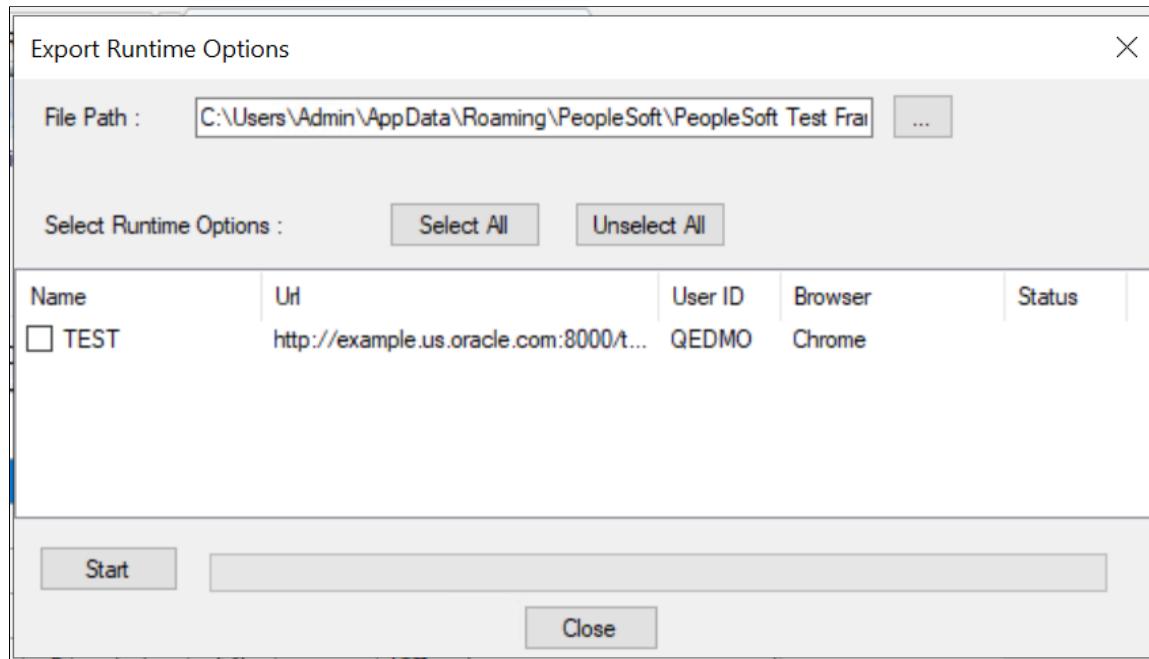
Only users with the PTF Administrator role can export and import Runtime Options for a database. You can use the **Export** button and **Import** button on the toolbar of Runtime Options dialog box to export and import. See [Configuring Runtime Options in PTF Client](#).

You can also use the command line to export and import runtime options. See [Using the Command Line](#).

## Using the PTF Client

You can export and import runtime options from the PeopleSoft Test Framework client. Click on the **Accept** button after you make any change to the settings on the runtime options dialog box, which saves all the settings. Only saved settings are exported to a data file. Any setting which is not saved will not be exported.

The following example shows the fields and controls of the Export Runtime Options dialog box.



<b>Field or Control</b>	<b>Description</b>
<b>File Path</b>	Browse to the location where you want to save the exported data file. By default the file path will show you the location specified in the Local Options dialog box. See <a href="#">Export/Import Options</a> . By default the file name for the data file is runtimeoptions.dat.
<b>Select Runtime Options</b>	Lists the runtime options available on the PTF client. You can select one or many saved runtime options to export. The Status column shows <b>Done</b> when the export process completes for the selected runtime option.
<b>Start</b>	Click the <b>Start</b> button to begin exporting.
<b>Close</b>	Click the <b>Close</b> button to stop the export. The dialog box will close and no further action will be taken.

The Import Runtime Options dialog box also has a similar interface with fields and controls explained above. When you click the **Open** button, all the runtime options contained in a data file is listed. The **Status** column shows if the runtime option is new or is it existing in the database.

If the runtime option exists in the database, that item is shown greyed out unless the **Overwrite Existing Items** check box is selected.

---

**Note:** After import completes the runtime option will be available in the database but to use it you will have to click the **Accept** button.

**Related Links**

[Configuring Runtime Options in PTF Client](#)

## Using the Command Line

You can export more than one instance of runtime options or import runtime options using the command line.

**Related Links**

[Configuring Runtime Options from the Command Line](#)



# Using PeopleSoft Test Framework

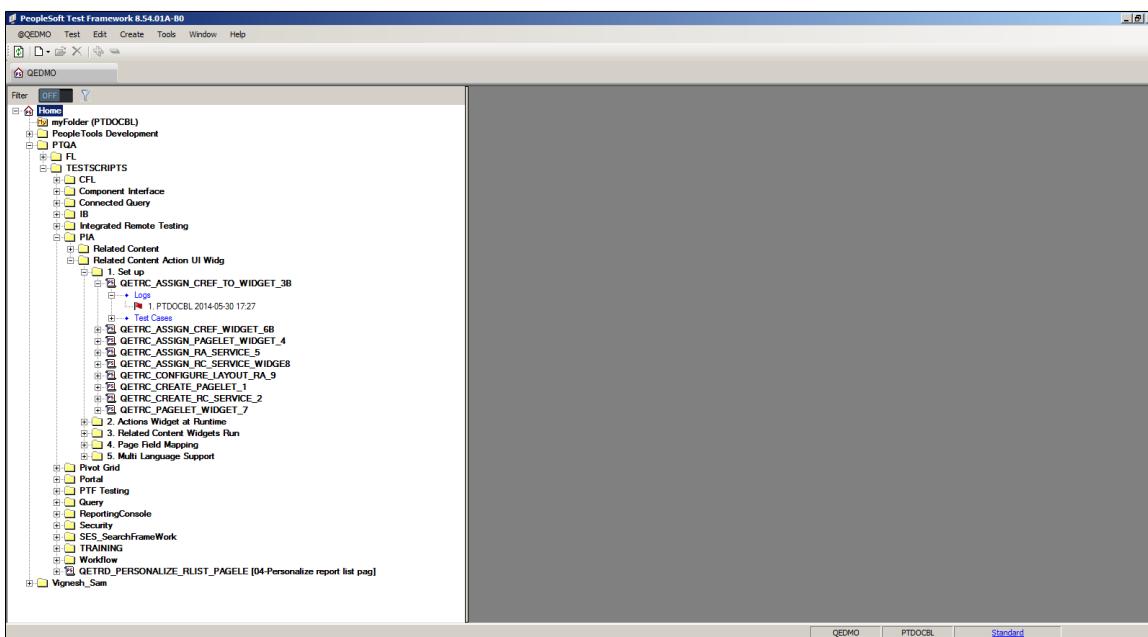
## Using PTF Explorer

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:

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.
- Run a test.
- 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.
Runtime Options	Opens the Runtime 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.

<b>Test Menu Command</b>	<b>Usage</b>
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 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>
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.
Tests PT Upgrade	Opens the Tests PT Upgrade dialog box, which enables you to upgrade tests from a previous version of PeopleTools.
Check/Kill Leftover Drivers	Closes all open test run windows to free up memory used by web drivers.

This table describes the PTF Explorer Window menu commands:

<b>Window Menu Command</b>	<b>Usage</b>
Quick Open	<p>Opens a test, test case or a text run 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 run logs.</p>
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 displays. 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

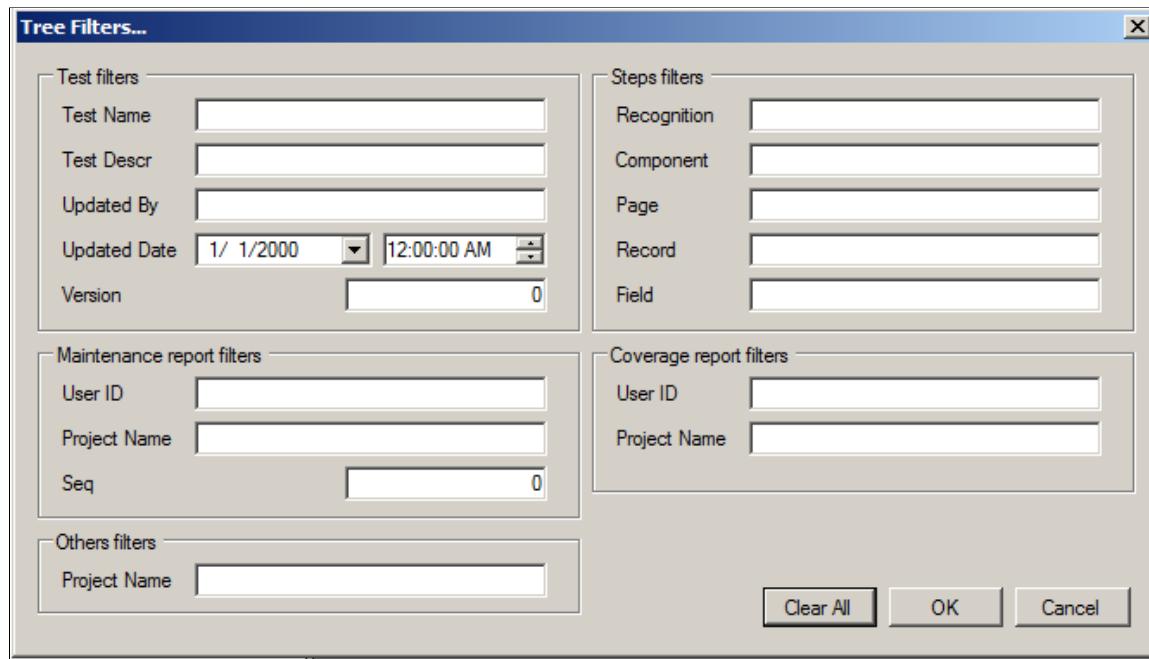
Use the following filter action icons, which appear above the PTF Explorer tree, to define, activate, or clear a filter:

<b>Term</b>	<b>Definition</b>
	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.

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
%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

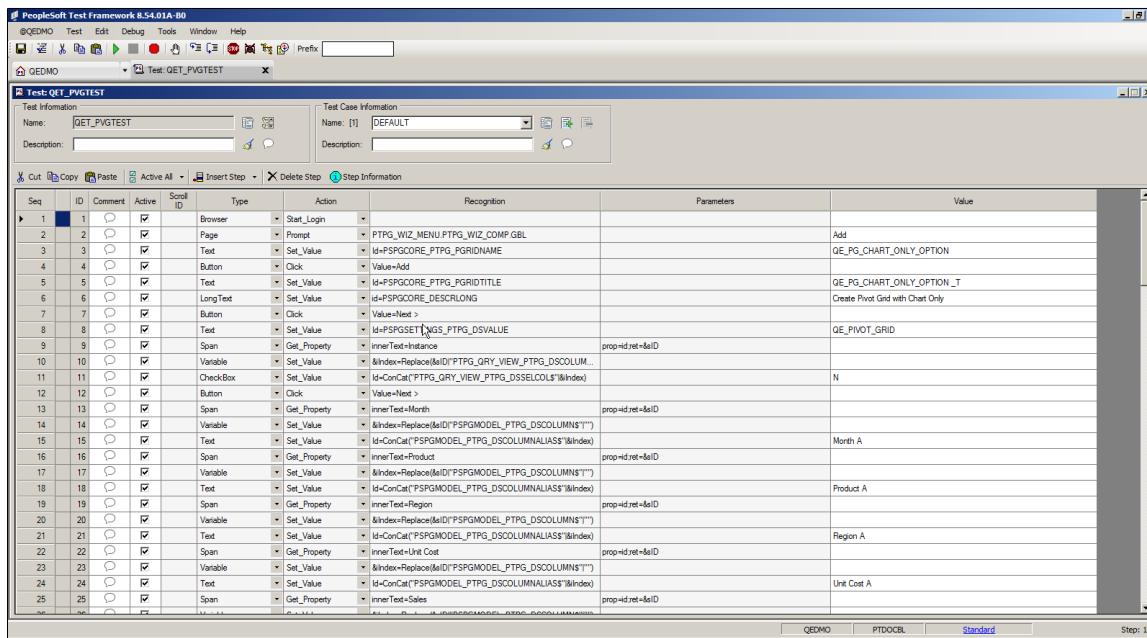
When you create or open a test, test case, or shell test, it opens in the Test Editor. The Test Editor enables you to:

- 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:

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



## Test Editor Menu

Note that many menu commands in the Test Editor are specific to the currently selected step.

### Test Editor PTF Menu Commands

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.
Runtime Options	Open the Runtime Options dialog.

### Test Editor Test Menu Commands

This table describes the Test Editor Test menu commands:

<b>Test Menu Commands</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	Copies a link to the test to the clipboard.  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.
Validate Test	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 or compare reports generated in Step 2 of the Test Maintenance Wizard.  See <a href="#">Creating Test Maintenance Reports</a> .
Check Syntax	Validates the parameter syntax and values.  See <a href="#">PTF Test Language</a>
Run	Runs the current test.
Run from Step	Runs the current test from the specified line number.
Pause	Pauses runtime of the test.
End	Stops runtime of the test.
Open Test Recorder	Launches the Test Recorder.

## Test Editor Edit Menu Commands

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	Finds occurrences of a specific text string in the current test. Select the <b>List all Matching Steps</b> check box to create a list of matches.
Again	Searches for the Find string again.

## Test Editor Debug Menu Commands

This table describes Test Editor Debug menu commands:

<b>Debug Menu Command</b>	<b>Usage</b>
Step Into	Runs the current step of the test and advances to the next step.
Step Over	Runs 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 runtime if the test encounters an error.  <b>Note:</b> This option can be also be enabled through the command line.
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.

<b>Debug Menu Command</b>	<b>Usage</b>
Overwrite Log	If a log window is open after the most recent runtime 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 runtime log.
Leave Browser Open	Keeps the PTF-launched browser window open after running a test, to assist with debugging. Be aware that if many tests are run with this option enabled, performance may degrade as the webdrivers used by PTF consume memory. Use the Kill Leftover Drivers option if performance is impacted.  <b>Note:</b> This option can be also be enabled through the command line.
Terminate Existing Browsers	Closes open Test Framework browser windows, to release the memory that is used by their associated web drivers. When the Leave Browser Open option is enabled, if performance issues arise, you can use Terminate Existing Browsers at any time to free up memory.

## Enabling Debug Options from the Command Line

You can enable the Stop on Error and Leave Browser Open debug options from the command line by using the **-SOE** and **-LBO** parameters respectively.

These parameters are used when you run a test from the command line using the *PsTestFW* command.

For Stop on Error (-SOE) parameter, you can specify *True*, *False*, or *Not Set* in the command line. The default value is *Not Set*.

The Stop on Error (-SOE) parameter is used as shown in the following example:

```
-CS=abc.us.oracle.com:443
-CUA=TRUE
-CO=VP1
-CP=VP1
-TST=TEST_KILL_1
-TC=DEFAULT
-PFX=
-RTO=LOCAL
-LOG=TEST_EXE.log
-SOE=TRUE
```

---

**Note:** Using Stop On Error (-SOE ) parameter in command line runtime will override the StopOnError runtime action in shell tests script.

---

The override works as follows:

- If `-SOE=True` in command line and `Runtime.StopOnError = False` in shelltest, the command line runtime of the called test is stopped that encounters a Fail.
- If `-SOE=False` in command line and `Runtime.StopOnError = True` or `ALL` in shelltest, the command line runtime of the called test will continue if it encounters a Fail.
- If `-SOE` is not set, command line runtime of the called test will continue based on the setting of `Runtime.StopOnError`.

For details on `StopOnError` runtime action, see [Runtime](#).

For Leave Browser Open (-LBO) parameter, you can specify *True* or *False* in the command line. The default value is *False*.

All existing browsers will be terminated by default before runtime when `-LBO` parameter is set in command line parameters, unless the `-TL` parameter is used in command line runtime.

The Leave Browser Open (-LBO) parameter is used as shown in the following example:

```
-CS=slc10ybf.us.oracle.com:443
-CUA=TRUE
-CO=VP1
-CP=VP1
-TST=TEST_KILL_1
-TC=DEFAULT
-PFX=
-RTO=LOCAL
-LOG=TEST_EXE.log
-LBO=TRUE
```

See [Running Tests](#).

## Test Editor Window Menu Commands

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 runtime logs.
Close All	Closes all windows.

## Test Editor Toolbar

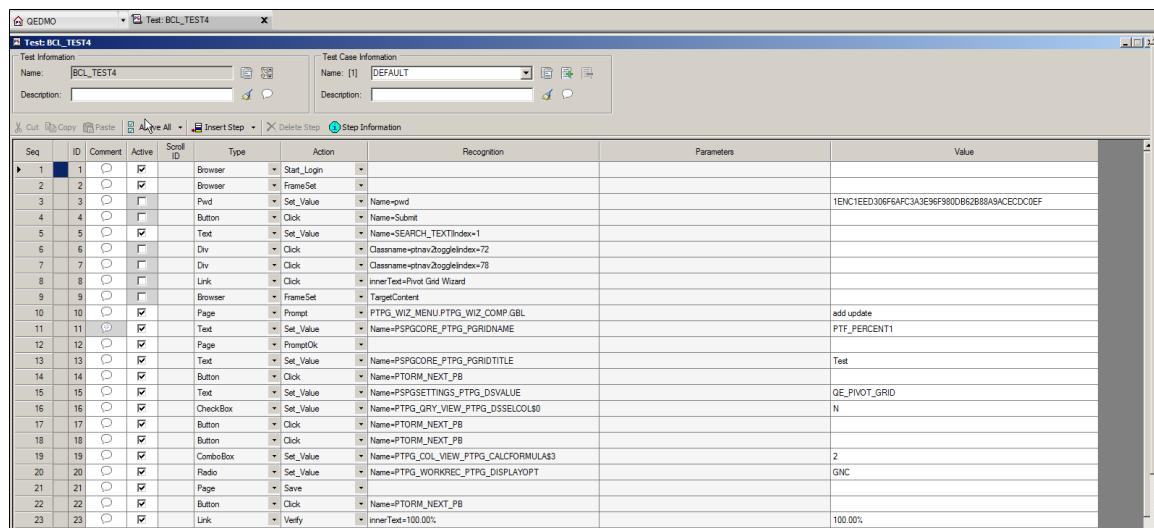
In addition to buttons for the standard Microsoft cut, copy, and paste commands, the test editor toolbar provides the following functions:

<b>Field or Control</b>	<b>Description</b>
	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 runtime log.
	Overwrite the open runtime log.
<b>Prefix</b> <input type="text"/>	Specify text that will be added to text fields when the test is run. 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:

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

Field or Control	Description
<b>Name</b>	Displays the test name. This field is display-only.
<b>Description</b>	Brief description of the test. You can enter a detailed description in the Comments.

### Test Information Functions

Field or Control	Description
	Test Save As.

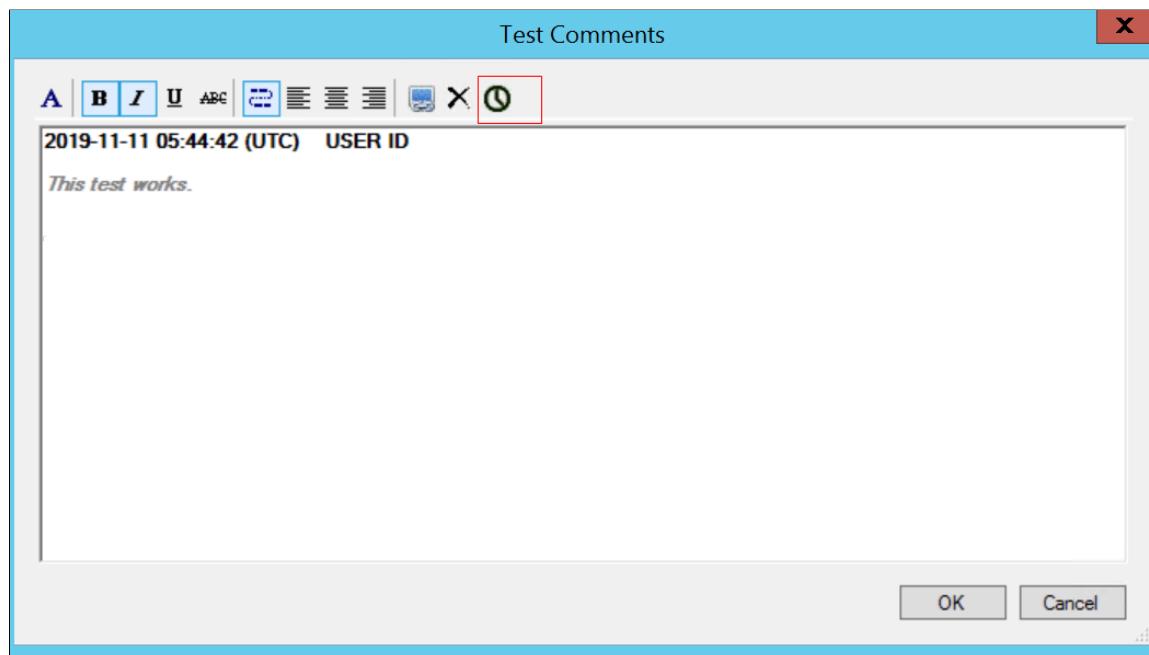
<b>Field or Control</b>	<b>Description</b>
	<p>Click to access the Message Recognition dialog box.</p> <p>Use the Message Recognition dialog box to define how PTF will respond to messages that are encountered during runtime of the test. The Message Recognition icon contains a check mark when the message recognition is enabled for the test.</p>
	<p>Open the Test Properties dialog. In the Language field, select the language for the PeopleSoft application. The default is English.</p> <p>Changing the value in the Language field only affects the language the test selects at sign in. It does not enable the test to run against a different language. PTF tests should be run against the same language in which they were recorded.</p> <p>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 <a href="#">Using Persistent Variables</a></p> <p>Select the Library Test check box to make the test a library test.</p> <p>See <a href="#">Using Library Tests</a>.</p>
	<p>Open the Test Comments dialog to enter comments or to insert a timestamp.</p>

## Using the Comments Editor

In the Comments dialog box, you can:

- Enter a long description using rich text and images.
- Insert a screen shot using the snapshot icon.
- Insert timestamp.

This example highlights the timestamp control on the Test Comments dialog box.



<b>Field or Control</b>	<b>Description</b>
	<p>Timestamp displays the current date, time, and user ID. Date and time follows ISO 8601 format, and uses UTC time zone. For example, <b>2018-12-10 14:30 (UTC) &lt;User ID&gt;</b>.</p> <p>To insert timestamp, click the <b>timestamp</b> icon or press F5.</p>

## Test Case Information Fields

<b>Field or Control</b>	<b>Description</b>
<b>Name</b>	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.
<b>Description</b>	Brief description of the test case. You can enter a detailed description in the comments.

## Test Case Information Functions

<b>Field or Control</b>	<b>Description</b>
	Test Case Save As.
	Create a new test case.
	Delete the selected test case.
	Open the Test Case Properties dialog.
	<p>Open the Test Case Comments dialog. You can enter a long description of the test case using Rich Text and images.</p> <p>Apart from entering text, you can insert timestamp.</p> <p>See the preceding section, “Using the Comments Editor,” for details.</p>

## Test Window Toolbar

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

<b>Field or Control</b>	<b>Description</b>
	<p>Selects the <b>Active</b> check box for all steps. Click the drop-down arrow for additional step activation options, including:</p> <ul style="list-style-type: none"> <li>• Active Selected Steps. Selects the <b>Active</b> check box for only selected steps.</li> <li>• Inactive Selected Steps. Deselects the <b>Active</b> check box for only selected steps.</li> <li>• Inactive All. Deselects the <b>Active</b> check box for all steps.</li> </ul>

<b>Field or Control</b>	<b>Description</b>
 <b>Insert Step</b> ▾	Inserts a new, blank step below the current step. Click the drop-down arrow to insert the new step above the current step.
 <b>Delete Step</b>	Deletes the current step.
 <b>Step Information</b>	Displays the Step Information dialog box showing the PeopleTools metadata associated with the object referenced in the step. See <a href="#">Using Step Information</a> for more information.

## Test Step Fields

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

<b>Field or Control</b>	<b>Description</b>
<b>Seq</b> (sequence)	A system-generated sequence number. Test steps run according to <b>Seq</b> order. When you move, add, or delete a step, <b>Seq</b> is refreshed.
<b>ID</b>	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 <b>ID</b> value.
<b>Comment</b>	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.
<b>Active</b>	Deselect this field to deactivate 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.
<b>Scroll ID</b>	This field is only required for scroll handling.
<b>Type</b>	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 running a test or query, setting a variable, or performing conditional processing.

<b>Field or Control</b>	<b>Description</b>
<b>Action</b>	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 <i>Set</i> and <i>Verify</i> .
<b>Recognition</b>	The means that PTF uses to identify the HTML object within the application. Often, this is the HTML ID property.
<b>Field Label</b>	<p>Contains the label text of the page control referenced in the Recognition field.</p> <p>The value for the Show Field Label option in the Local Options dialog box determines whether this column appears:</p> <ul style="list-style-type: none"> <li>• If <b>Column</b> is selected, the Field Label column appears.</li> <li>• If <b>Tooltip</b> 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.</li> </ul> <p>For more information about setting local options, see <a href="#">Configuring Local Options</a>.</p>
<b>Parameters</b>	<p>The conditions that apply to this specific step, if applicable.</p> <p><b>Note:</b> 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.</p>
<b>Value</b>	<p>In a typical recorded step, this is the value the tester entered for an object.</p> <p>In a step recorded in Verify mode, this would be the value that was present in the object when it was checked.</p> <p><b>Value</b> is part of the test case, not the test itself.</p>

## Related Links

[PTF Test Language](#)

[Creating Tests](#)

## Using the PTF Recorder with Chrome and Microsoft Edge

You can use the PTF Recorder with Chrome or Microsoft Edge browser 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 also add additional steps, such as Verify, Log, and Conditional, that do not directly correspond to actions performed in the target application.

To launch Chrome-based or Microsoft Edge-based recorder, select the required browser in the Runtime Options in the PTF client.

For details, see [Options Tab](#).

This section discusses:

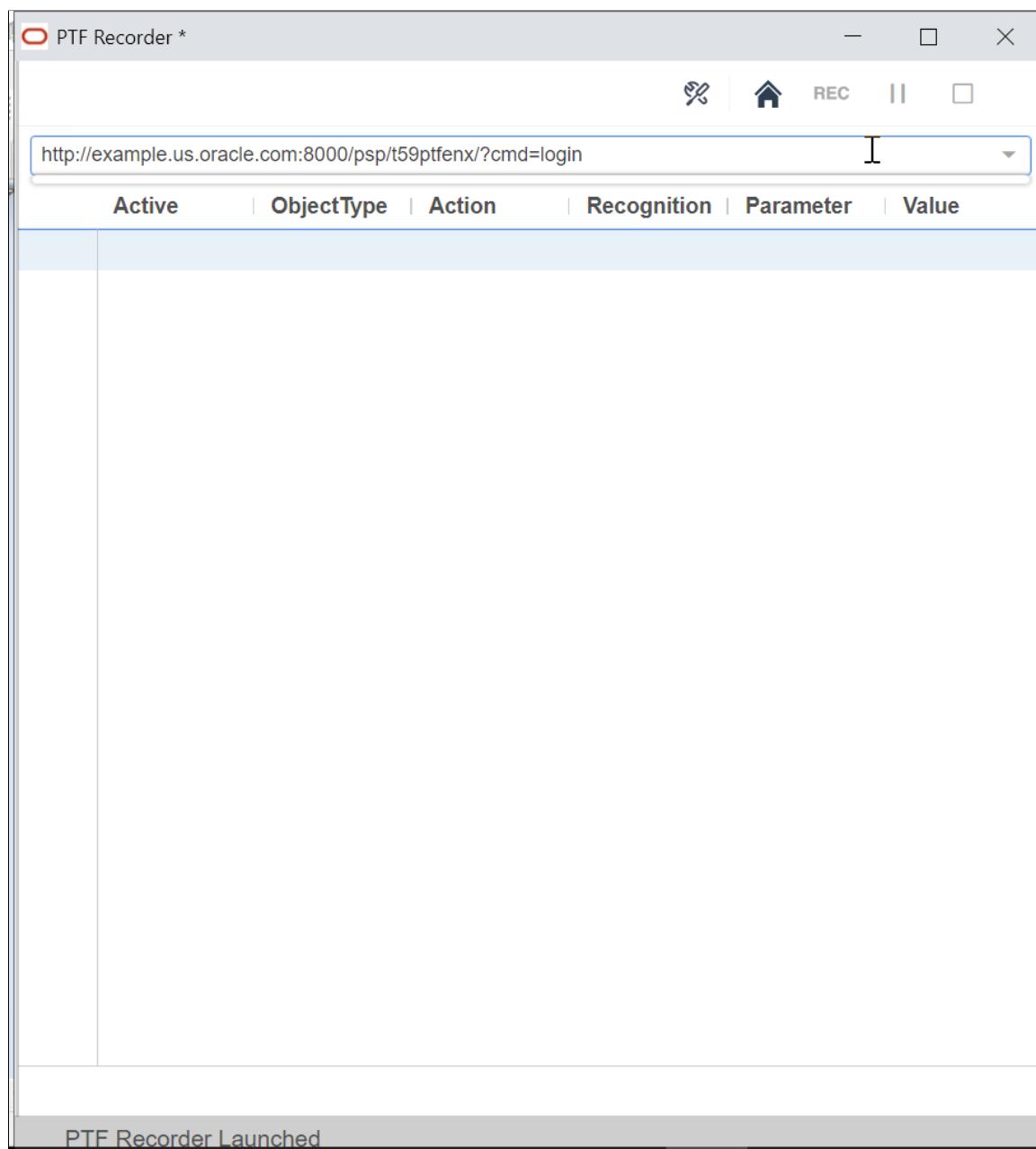
- The PTF Recorder.
- Adding actions.
- Inserting action steps.
- Adding scroll variables.
- Configuring recorder settings.
- Modifying recorded steps.

## PTF Recorder

PTF client launches the PTF Recorder as a browser application where you can open the PeopleSoft application page and start recording.

To access the PTF Recorder, select Test, Open Test Recorder or click the Show Test Recorder icon (red icon).

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



The recorder opens with a 'PTF Recorder Launched' message at the bottom of the window.

You can control the recording actions with the tools available on the PTF Recorder.

This list describes the recording action tools.

<b>Field or Control</b>	<b>Description</b>
	Configure the recorder settings. See <a href="#">Configuring Recorder Settings</a>

<b>Field or Control</b>	<b>Description</b>
	Launch a PeopleSoft application in Chrome or Microsoft Edge browser window using the URL configured in the run option and hook the browser instance to the recorder.
	<p>Start or resume recording. When you begin recording, the recorder adds or inserts steps following the current step.</p> <p>When you resume recording, after pausing, you are prompted to choose from these options:</p> <ul style="list-style-type: none"> <li>• After the current step (do not delete the subsequent steps)</li> <li>• After the current step (delete subsequent steps)</li> <li>• At the end of the test.</li> </ul> <p><b>Note:</b> These options appear <i>only</i> if the current selected step is not the last recorded step. If the selected step is the last recorded step, then the recorder resumes without these options.</p>
	Pause recording.
	Stop recording to create steps in the test for each recorded action.

## Re-Hooking an Existing Page

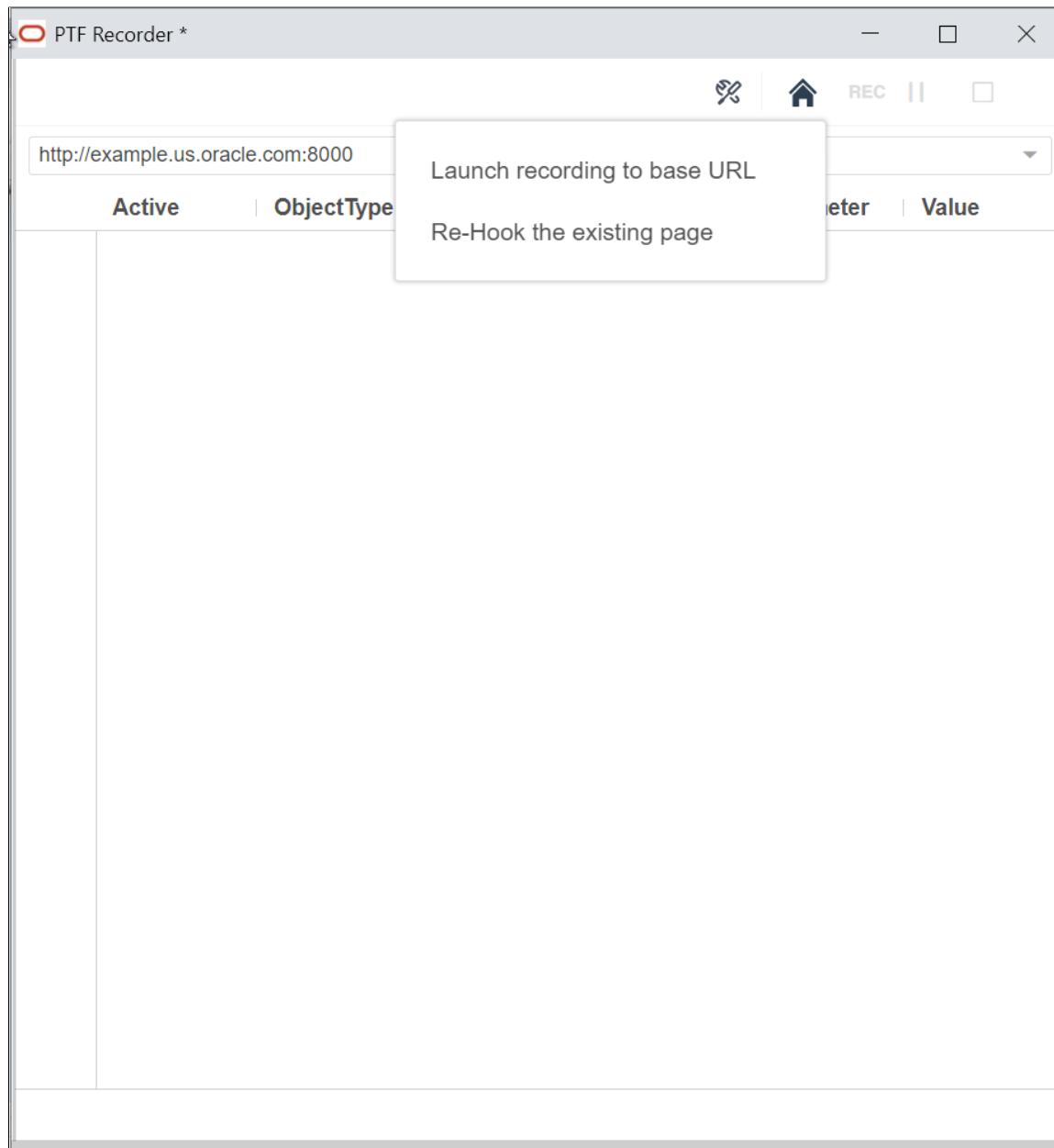
After recording few steps in a PIA page, you may want to record again from the point where you stopped or you may want to navigate to a certain page and then record from that page.

When user stops recording, the recorded steps gets processed and is available in the PTF client, without closing the PTF recorder and the PIA page.

You can record new steps by re-hooking the already opened PIA page, provided that the PIA page is still active, or the base URL page depending on the option selected.

To re-hook to an existing PIA page, ensure that you do not manually close the PTF Recorder and the PIA page.

This example shows the option to re-hook an existing page



On the PTF Recorder, click the Start web client icon, and select the Re-Hook the existing page option.

When you re-hook, the browser becomes active and you can start recording. The recorded step appends to the unsaved test script.

---

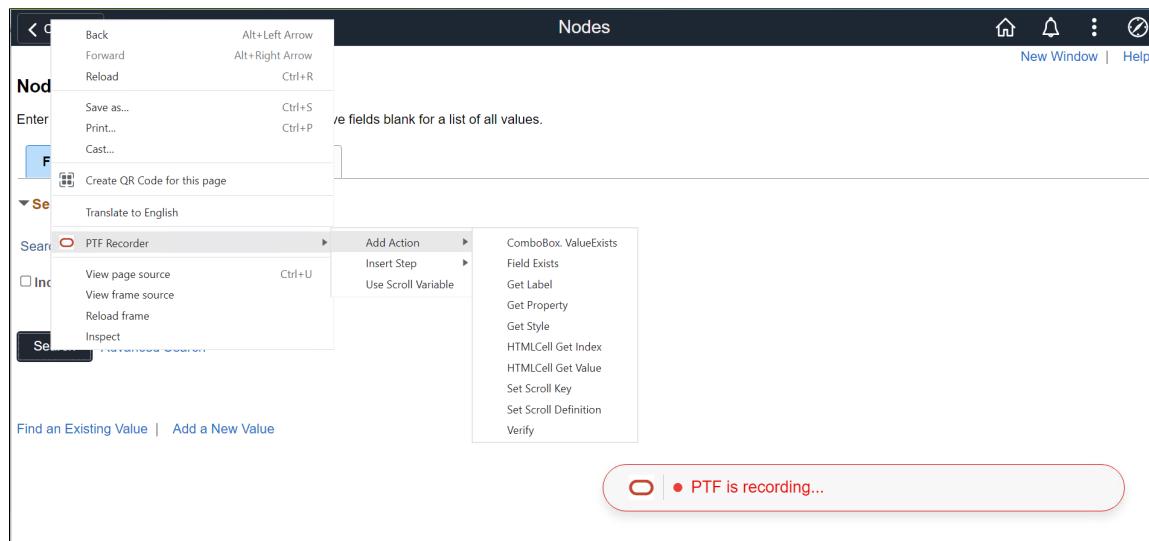
**Note:** Re-hook works on the most recently opened or used PIA page instance by the PTF Recorder.

---

## Adding Actions

You can add actions directly on the page elements on the PeopleSoft Application pages.

You can select and add an action on a page element from the Add Action options.



To add actions:

1. Right-click on the page element.
2. Select PTF Recorder, Add Action, then select an action.

This list describes the action options:

<b>Field or Control</b>	<b>Description</b>
ComboBox.ValueExists	Adds a ComboBox.ValueExists step. You are prompted to select the value, and the variable to store the return value, and to select an expected value. Valid values are True, False, or Ignore.
Field Exists	Adds an Exists step. 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. See <a href="#">Exists</a> .
Get Label	Adds a GetLabel step. You are prompted for the return variable that will contain the label. See <a href="#">GetLabel</a>
Get Property	Adds a GetProperty step. 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. See <a href="#">GetProperty</a> .

<b>Field or Control</b>	<b>Description</b>
Get Style	Adds a GetStyle step. You are prompted with a list of style definitions for the selected page element. Enter a variable name or select an existing variable name for one or more style definitions. The recorder adds a GetStyle step for each style you identify.
HTMLCell Get Index	Returns the index value for an HTML table cell. You are prompted for the return variable that will contain the HTML index.  See <a href="#">CellGetIndex</a>
HTMLCell Get Value	Returns the value for an HTML table cell. You are prompted for the return variable that will contain the HTML cell value.  See <a href="#">CellGetValue</a>
Set Scroll Key	Adds a Scroll.Key_Set step. Enter a Scroll ID in the Step Modification area and click the Confirm icon.  See <a href="#">Incorporating Scroll Handling</a>
Set Scroll Definition	The Step:Scroll Definition dialog box appears where you can select the definition type and other details.  See <a href="#">Scroll</a> .
Verify	Adds a Verify step. The step is automatically populated with the object ID and value of the field.  See <a href="#">Verify</a> .

**Note:** Chrome and Microsoft Edge-based PTF recorders allow recording of right-click, save as action on a link.

For details on SaveTargetAs action, see [SaveTargetAs](#)

## Inserting Action Steps

On the PIA page, you can insert test steps that provide logic constructs, manage scroll actions, and add variables and logs.

To insert test steps:

1. Right-click on the PeopleSoft Application page.
2. Select PTF Recorder, Insert Step, then insert the required step.

This list describes the options for test steps:

<b>Field or Control</b>	<b>Description</b>
<i>Add Log</i>	<p>Adds a Log step.</p> <p>You are prompted to select a Log action and enter text for the Message and Details.</p>
<i>Add Variable</i>	<p>Adds a Variable.Set_Value step. You are prompted for Variable Name and Value. User-defined variables and PTF test variables appear in the &lt;Select Variable&gt; drop down list.</p> <p>See <a href="#">Variable</a>, <a href="#">System Variables</a>.</p>
<i>End-If</i>	<p>Adds a Conditional.End_If step.</p>
<i>If-Then</i>	<p>Adds a Conditional If_Then construct. You are prompted for an expression, such as &amp;Exists=True. The Recorder inserts a Conditional.If_Then step. Record additional steps, then select <i>End-If</i> to add a Conditional.End_If step.</p> <p>See <a href="#">Conditional</a>.</p>
<i>Scroll Action</i>	<p>Adds a Scroll.Action step. You are prompted to enter a Scroll ID, return variable, and action. Click the Confirm icon.</p>
<i>Scroll Reset</i>	<p>Select to delete all rows with the specified scroll ID</p>

## Adding Scroll Variables

You can add scroll variables on PeopleSoft application pages.

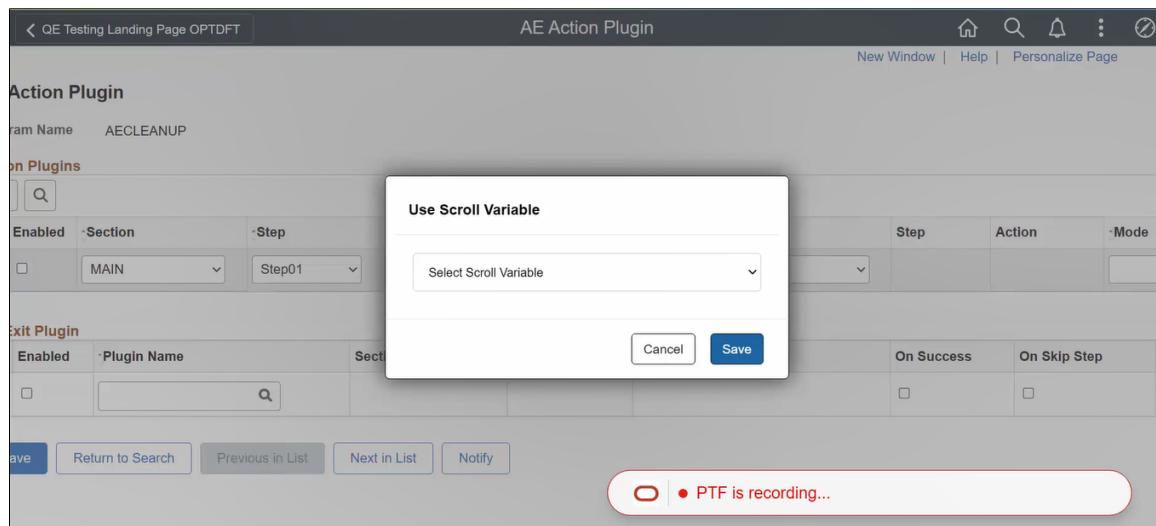
Use scroll variable in conjunction with action or steps that utilize variables.

To add:

1. Right-click on the PIA page.
2. Select PTF Test Recorder, Use Scroll Variable.

On the PIA page, the Use Scroll Variable pop-up page appears where you can select the scroll variable.

This example shows the Use Scroll Variable pop-up page.



## Configuring Recorder Settings

To configure the recorder settings, click the recorder settings icon on the PTF Recorder.

This list describes the recorder settings:

<b>Field or Control</b>	<b>Description</b>
Use Page Prompt	<p>If you select the Use Page Prompt 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.</p> <hr/> <p><b>Note:</b> When recording a search page with facets, PTF does not automatically insert Page.Prompt constructs because all user actions with facets must be recorded.</p> <hr/> <p>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 drop-down list, search, or take any other action on a search page, do not use Page Prompt mode, use explicit menu navigation.</p> <p>See <a href="#">Page</a>.</p>
File Download Prompt	<p>Select the File Download Prompt check box to prompt for the file path when recording a step that does a file download as well as a file upload.</p> <p>See <a href="#">Download</a></p>

<b>Field or Control</b>	<b>Description</b>
Message Recognition	<p>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.</p> <p>See <a href="#">Handling Application Messages</a>.</p>
Use Scroll Variables	<p>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 <code>\$n</code> by the selected PTF variable. For example if the field is FIELDNAME\$0, and the scroll variable is <code>&amp;scr1</code>, PTF will record FIELDNAME&amp;scr1.</p> <p>See <a href="#">Scroll</a></p>
Run Control Recognition	<p>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.</p> <p><b>Note:</b> Similar to the Page Prompt with facet, this option is only applicable to a conventional Process Scheduler page.</p> <p>See <a href="#">Run</a></p>
Use Page Expand	<p>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.</p> <p>See <a href="#">Page</a></p>
Ignore Login Steps	<p>If you select the Ignore Login Steps check box, the Test Recorder will ignore all actions on the login page.</p>

## Modifying Recorded Steps

You can modify steps recorded during the current session by pausing the session and editing the step in the PTF Recorder.

Fields or controls for modifying steps.

The screenshot shows the PTF Recorder application window. At the top, there's a toolbar with icons for settings, home, recording status (REC), and exit. Below the toolbar, the URL 'http://example.us.oracle.com' is displayed. The main area is a table listing recorded steps:

	Active	ObjectType	Action	Recognition	Parameter	Value
6	<input checked="" type="checkbox"/>	Variable	Set_Value	&var1		123
7	<input checked="" type="checkbox"/>	ComboBox	Set_Value	id=QE_WORK_ REC1_QE_MO DELESS_OPEN		C
8	<input checked="" type="checkbox"/>	CheckBox	Set_Value	id=QE_WORK_ REC1_QE_CF VALUE_YESNO		Y
9	<input checked="" type="checkbox"/>	ComboBox	Get_Property	id=QE_WORK_ REC1_QE_MO DELESS_OPEN	prop=className; ret=&var1;	
10	<input checked="" type="checkbox"/>	ComboBox	Get_Property	id=QE_WORK_ REC1_QE_MO DELESS_OPEN	prop=disabled; ret=&var2;	
11	<input checked="" type="checkbox"/>	ComboBox	Get_Property	id=QE_WORK_ REC1_QE_MO DELESS_OPEN	prop=id;ret=&var3;	
12	<input checked="" type="checkbox"/>	Link	Exists	id=QE_WORK_ REC1_QE_PUS H1_WCB	expected=true; ret=&var4;	
13	<input checked="" type="checkbox"/>	Scroll	Action		expected=false; ret=&var3;	find

Below the table, a modal dialog titled 'Edit Selected Step' is open. It contains four input fields: 'Return Variables' (set to '&var3'), 'Action' (set to 'find'), 'Expected' (set to 'false'), and 'Scroll Id' (empty). A red error message at the bottom of the dialog says 'Error! - Scroll ID must be a numeric value.' At the bottom right of the dialog are 'Save' and 'Cancel' buttons, with 'Cancel' being highlighted with a mouse cursor. A status bar at the bottom of the application window says 'Recording Paused'.

When the recording is paused, the PTF Recorder becomes active where you can highlight a recorded step and edit any of its values.

You can enable or disable the recorded steps by selecting or clearing the **Active** option.

The Edit Selected Step window appears when you highlight a recorded step to edit. The editable parameters of the selected step are displayed in this window.

If you enter incorrect parameter value, an error message is displayed in red.

Get\_Property, If\_Then and Scroll\_Action are examples of action steps that can be edited.

## Using the Log Viewer

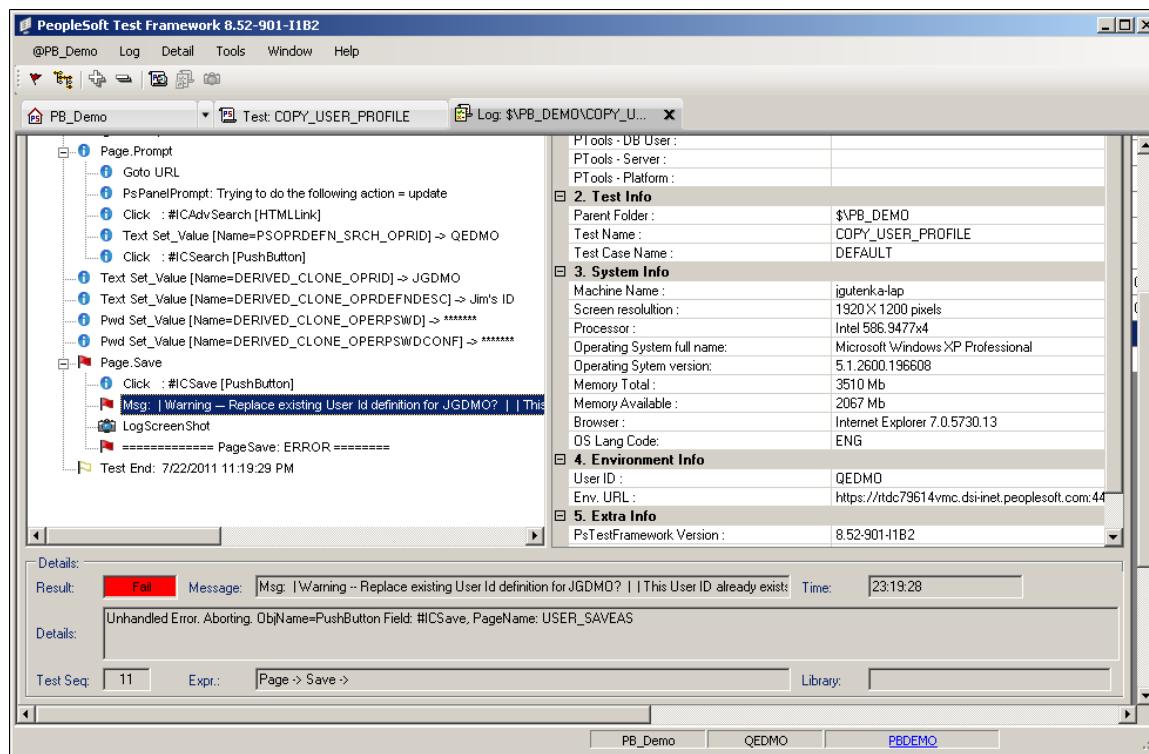
Whenever you run a test, PTF creates a run log. The log is located in PTF Explorer under the test name, in the log folder specified in Runtime Options.

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:

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>Window Menu Command</b>	<b>Usage</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.

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

## Related Links

[Reviewing Test Logs](#)

[Interpreting Logs](#)



# Creating Tests and Test Cases

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## Creating Tests

This section discusses how to create and manage tests.

### 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 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	<input type="button" value="Start_Login"/>			
2	28		<input checked="" type="checkbox"/>		Browser	<input type="button" value="FrameSet"/>			
3	29		<input type="checkbox"/>		Text	<input type="button" value="Set_Value"/>	Name=userid		PTDOCBL
4	30		<input type="checkbox"/>		Pwd	<input type="button" value="Set_Value"/>	Name=pwd		1ENC29CD008E830562C4010DE2C487016EC80509EEC
5	31		<input type="checkbox"/>		Button	<input type="button" value="Click"/>	Name=Submit		
6	32		<input type="checkbox"/>		Link	<input type="button" value="Click"/>	d-phninvba_PORTAL_ROOT_OBJECT		
7	33		<input type="checkbox"/>		Link	<input type="button" value="Click"/>	Name=idra_PT_PEOPLETOTALSIndex=0		
8	34		<input type="checkbox"/>		Link	<input type="button" value="Click"/>	d-idra_PT_SECURITY		
9	35		<input type="checkbox"/>		Link	<input type="button" value="Click"/>	d-idra_PT_PERMISSIONS_ROLES		
10	36		<input type="checkbox"/>		Link	<input type="button" value="Click"/>	d-idra_PT_USER_PROFILES		
11	37		<input type="checkbox"/>		Link	<input type="button" value="Click"/>	innerText=<User Profile>Index=1		
12	38		<input type="checkbox"/>		Browser	<input type="button" value="FrameSet"/>	TargetContent		
13	39		<input checked="" type="checkbox"/>		Page	<input type="button" value="Prompt"/>	MAINTAIN_SECURITY.USERMAINT.GBL		update
14	40		<input type="checkbox"/>		Page	<input type="button" value="PromptOk"/>			
15	41		<input checked="" type="checkbox"/>		Page	<input type="button" value="Prompt"/>	MAINTAIN_SECURITY.USERMAINT.GBL		update
16	42		<input checked="" type="checkbox"/>	2	Scroll	<input type="button" value="Action"/>	ret=&variable1		ins
17	43		<input type="checkbox"/>		Variable	<input type="button" value="Set_Value"/>	&Test		Test 1
18	2		<input checked="" type="checkbox"/>		Browser	<input type="button" value="FrameSet"/>			
19	3		<input type="checkbox"/>		Pwd	<input type="button" value="Set_Value"/>	Name=pwd		1ENCIED30F6APC3A3E96F980DB62B88A9ACECDC0EF
20	4		<input type="checkbox"/>		Button	<input type="button" value="Click"/>	Name=Submit		
21	5		<input type="checkbox"/>		Text	<input type="button" value="Set_Value"/>	Name=SEARCH_TEXTIndex=1		
22	6		<input type="checkbox"/>		Div	<input type="button" value="Click"/>	Classname=etnna2oggleIndex=72		
23	7		<input type="checkbox"/>		Div	<input type="button" value="Click"/>	Classname=etnna2oggleIndex=78		
24	8		<input type="checkbox"/>		Link	<input type="button" value="Click"/>	innerText=Pivot Grid Wizard		
25	9		<input type="checkbox"/>		Browser	<input type="button" value="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.

In the Comments dialog, apart from entering text, you can insert timestamp also.

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 run log.
- Insert a conditional construct.
- Reference scrolls.
- Reference HTML table cell contents.
- Add or modify step comments.

## Related Links

[Using the PTF Recorder with Chrome and Microsoft Edge](#)

[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. PTF client launches the PTF Recorder as a browser application where you can open the PeopleSoft application page and start recording.

---

**Note:** To record a test, use the PTF Recorder with Chrome and Microsoft Edge browsers. For instructions, see [Using the PTF Recorder with Chrome and Microsoft Edge](#)

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

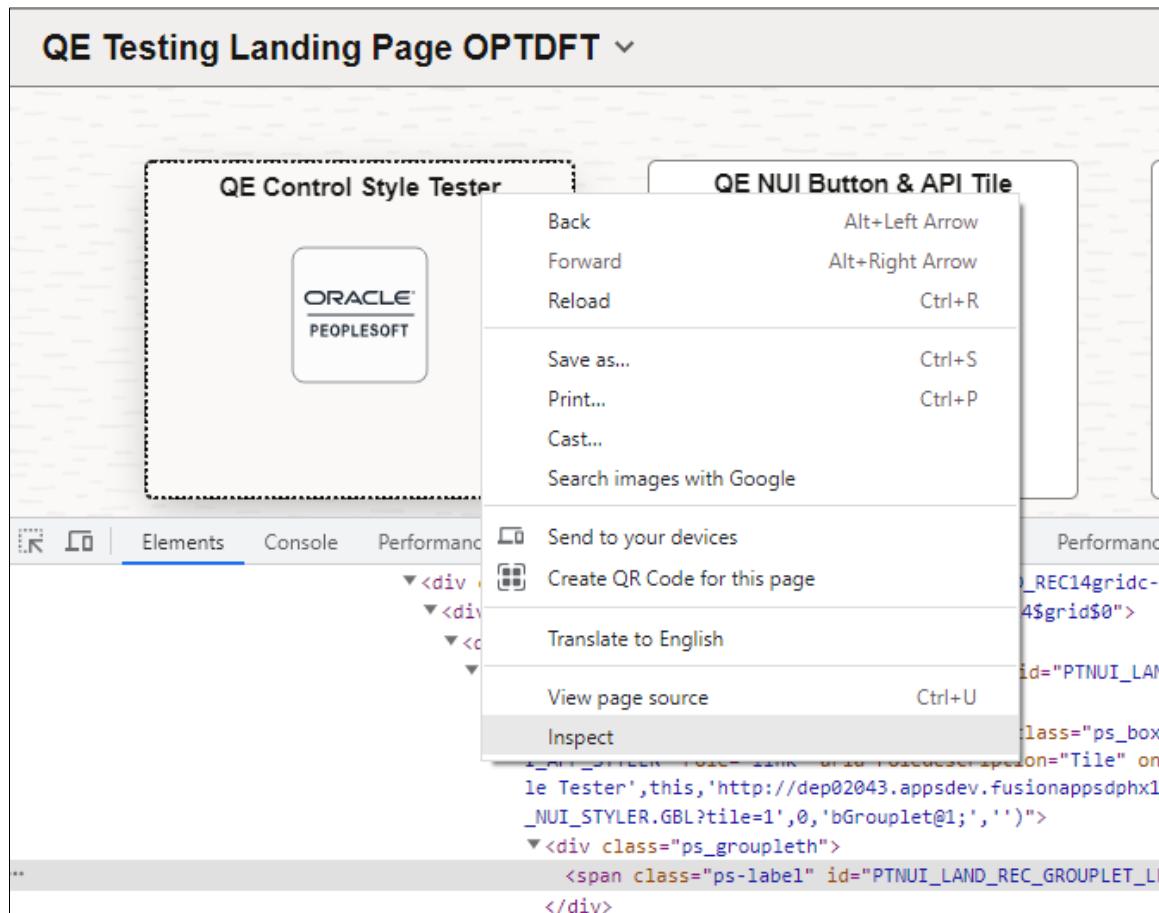
To hook, click the **Start Web Client** icon on the PTF Recorder browser application.

6. Click the **Start Recording** icon in the PTF Recorder browser application.
7. Perform the test steps in the PeopleSoft application.
8. As needed, add actions directly on the page elements on the PeopleSoft Application pages.
9. Modify steps by pausing the session and editing the step in the PTF Recorder. The Edit Selected Step window appears when you highlight a recorded step to edit. The editable parameters of the selected step are displayed in this window.
10. Click the **Stop Recording** icon in the PTF Recorder browser application to end the recording and write the steps to the test.
11. Save the test.

## Inspect Page Elements

While recording a test script, use the browser's inbuilt element inspector to inspect the page elements such as types, IDs, properties, and styles.

This example illustrates the fields and controls associated with the element Inspector.



## Related Links

[Using the PTF Recorder with Chrome and Microsoft Edge](#)

[Defining PTF Configuration Options](#)

---

## Opening Tests

This section discusses how to open tests.

### 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

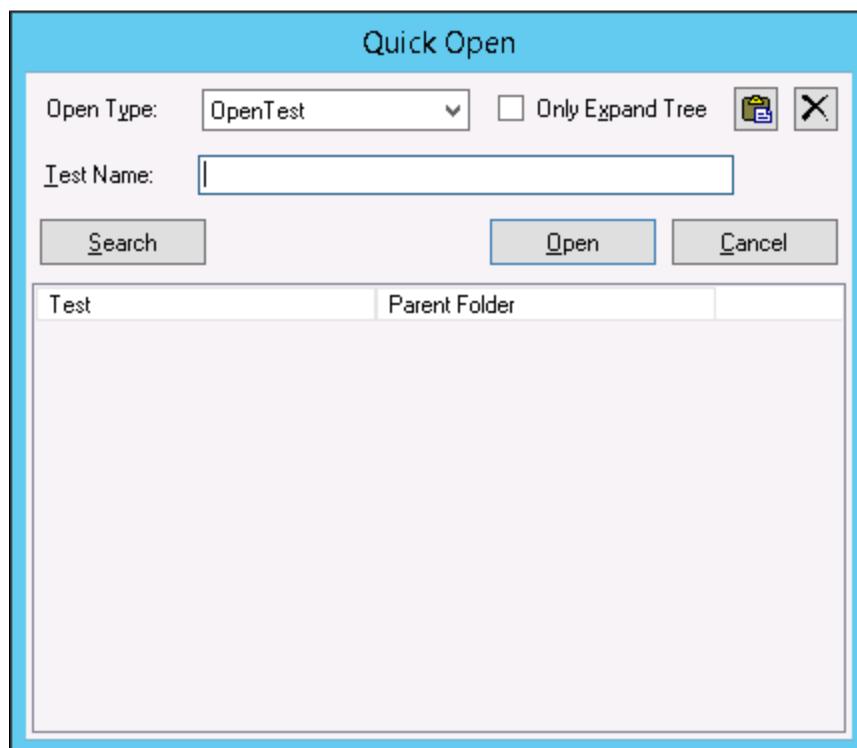
To open multiple tests with PTF Explorer:

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**.

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.

<b>Field or Control</b>	<b>Description</b>
<b>Open Type</b>	<p>Select the type of test asset to open. Options are:</p> <ul style="list-style-type: none"> <li>• <i>Open Test</i></li> <li>• <i>Open Case</i></li> <li>• <i>Open Log</i></li> </ul>
<b>Only Expand Tree</b>	<p>Select this check box to only expand the tree folder the asset is associated with, not load the test asset.</p>
<b>Test Name</b>	<p>Enter the test name.</p>
<b>Case Name</b>	<p>This field is available only when <b>Open Type</b> is set to <i>Open Case</i>.</p> <p>Enter the test case name.</p>
<b>Log Folder</b>	<p>This field is available only when <b>Open Type</b> is set to <i>Open Log</i>.</p> <p>Enter the name of the log folder.</p>
<b>Log Name</b>	<p>This field is available only when <b>Open Type</b> 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 <b>Test Name</b>. Partial matches are supported for <b>Test Name</b> 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 <b>Open</b>.</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>

## Working with 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 case 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 or insert timestamp.

For details, see [Test Window Fields](#)

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.

This example illustrates a new test case with blank values.

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=default innerText=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.

## Managing Values when Pasting Test Steps

When you cut/copy and paste test steps, a dialog box appears providing options for how to manage test case values. You can select one of the following options.

- Paste only the steps, leaving the test case values blank.
- Paste the current test case values from the source to the target.
- Paste the test case values only for matching test case names.

---

## 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.

---

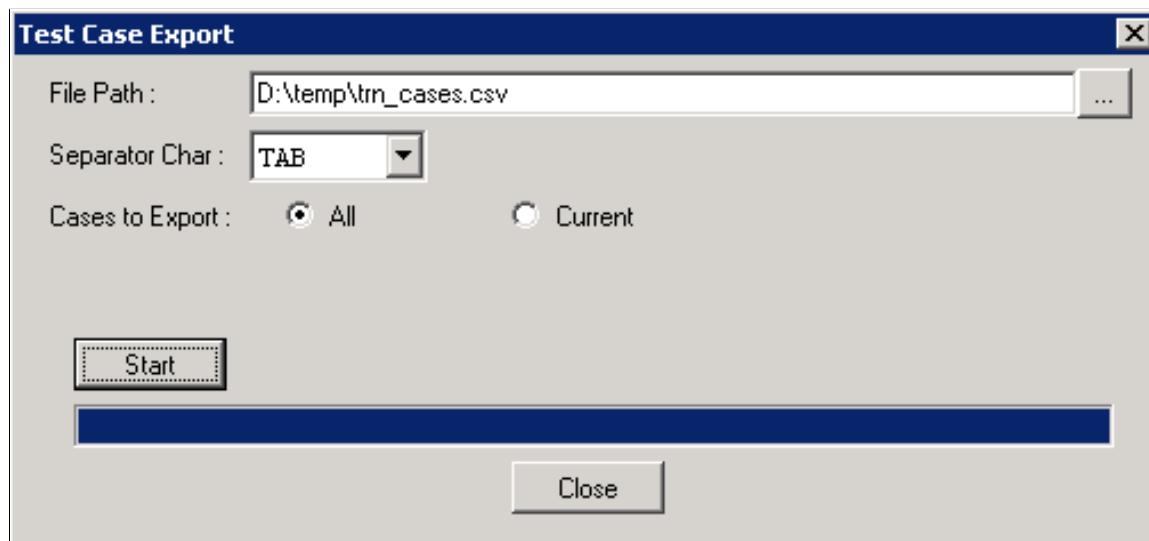
**Note:** The default separator character is a comma, which is also the default separator used by spreadsheet programs. If any of the values in your test case contain commas, the value will be split into separate fields. If you have commas in your test case values, choose a different separator.

---

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.

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

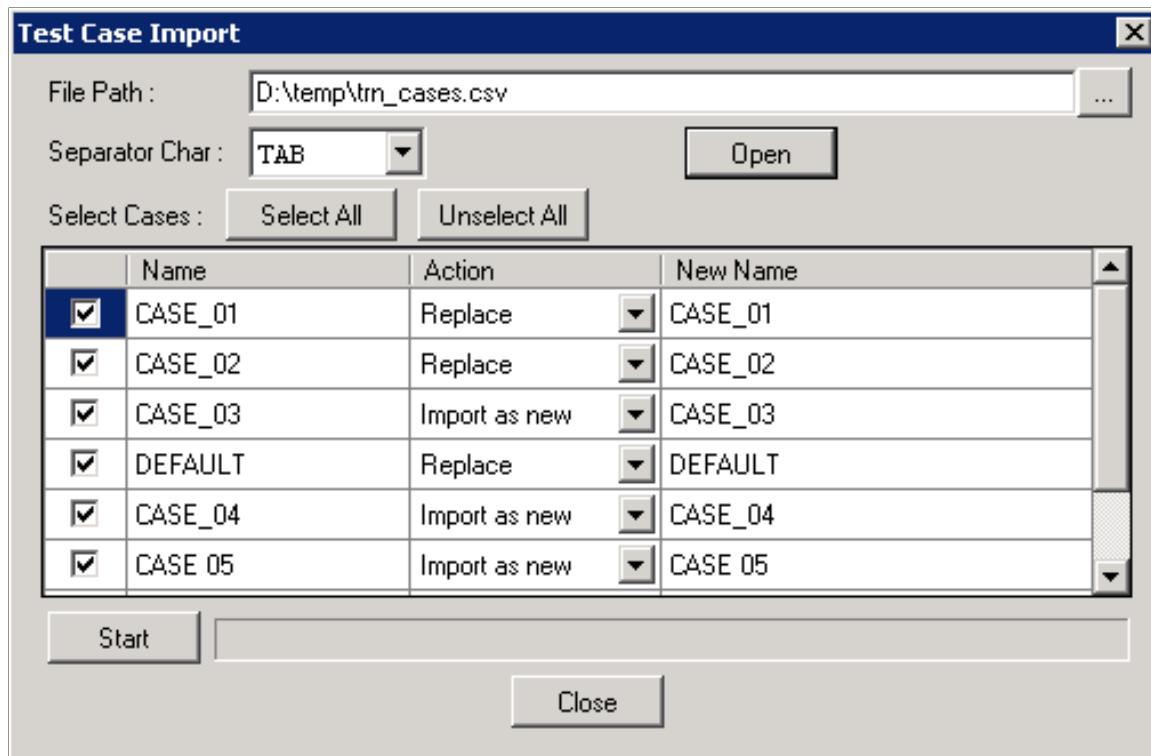


## Importing Test Cases

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

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 case name in New Name field.

5. Select the test cases to import.
6. Click Start.

## Running Tests

This section describes how to run tests and test cases.

### Running a Test

To run a test:

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

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

2. If **Yes** is specified in the **Prompt for Options** field for the default runtime option, then the Runtime Options dialog box appears.

Select an runtime option from the list and click **Accept**.

PTF opens the PeopleSoft application specified in Runtime Options and runs the steps in the test.

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

---

**Note:** When PTF runs a test it disables **Num Lock** and **Caps Lock** on your keyboard and restores them when the test completes. If the runtime 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**. Also, you should not press the **Caps Lock** or **Num Lock** keys during test runtime; if you do, subsequent test steps may fail. Also, you should not press the **Caps Lock** or **Num Lock** keys, during test runtime; if you do, subsequent test steps may fail.

---

## Related Links

[Reviewing Test Logs](#)

## Running a Test Case

To run 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](#)

## Running a Test from a Specific Step

You can start runtime 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 running a test using the Run from Step command, such as Browser.Frameset, assigning variables, and hooking the browser, for example.

---

To run 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 runtime, and click **OK**.

If the specified sequence number does not exist, test runtime 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 runtime begins with the next highest sequence number.

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

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

## Running a Test from the Command Line

You can run a test from the command line using the **PsTestFW** command.

Enter a *text file* argument which contains all the parameters in the command line. The text file is deleted immediately after PTF client reads it. You can write the text file manually or it is generated from the Change Assistant during runtime.

The parameters in the file must follow the below guidelines:

- Split the parameter and its value with =.
- Enter each parameter and its value in a new line.
- Enter each parameter and its value in a single line.

For example, your text file will include the following statements.

```
-CS=<server>:<port>
-CUA=TRUE
-CO=<userID>
-CP=<password>
-TST=<TestNameFile>
-TC=DEFAULT
-ACTION=testrun /*testrun value is used for running test.*/
-PFX=
-RTO=<RuntimeOptions>
-LOG=<logfile name>.log
```

### Syntax

Use the following syntax to run the test using a *text file* argument.

```
'<Path>\PsTestFw.exe' '<C:\temp\ptf_cmd_param.txt'
```

Use the following syntax to run a test using the existing environment connection:

```
PsTestFw -CD=ConnectionName -CP=ConnectionPassword -TST=TestName
-TC=TestCaseName [-TL=Line X(integer)] [-PFX=Prefix] =RuntimeOption [-LOG=LogFileName]
[-ACTION=testrun]
```

Use the following syntax to run 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(inte
ger)]
[-ACTION=testrun] [-PFX=Prefix] =RuntimeOption [-LOG=LogFileName]
```

## Parameters

<b>Field or Control</b>	<b>Description</b>
-CD=	<p>Specify the name of the environment login 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.</p> <p>The environment login settings are stored in the environments.xml file in the PTF data directory (C:\Documents and Settings\&lt;User&gt;\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.</p> <p>See <a href="#">Creating a Connection to a PTF Environment</a>.</p>
-CUA=	<p>(Optional) Action on the SSL error. Values are:</p> <ul style="list-style-type: none"> <li>• True—Continue with unsecured connection.</li> <li>• False—Cancel the login.</li> </ul>
-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=	<p>(Optional) Specify the prefix.</p> <p>See <a href="#">#PREFIX#</a></p>
-RTO=	<p>Specify the runtime option to be used in the runtime.</p> <hr/> <p><b>Note:</b> The name of the runtime option must not contain the following characters: space &amp; ? / \ * &lt; &gt; ' "</p>
-ACTION=	(Optional) action type. For test runtime, the value is <i>testrun</i> .

<b>Field or Control</b>	<b>Description</b>
-LOG=	(Optional) Specify the name for the log. The default is unattended.log.
-SOE=	(Optional) Stops runtime if the test encounters an error. See <a href="#">Using the Test Editor</a>
-LBO=	(Optional) Keeps the PTF-launched browser window open after running a test, to assist with debugging. See <a href="#">Using the Test Editor</a>

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

<b>Field or Control</b>	<b>Description</b>
-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.
-ACTION=	(Optional) action type. For test runtime, the value is <i>testrun</i> .

## Example

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

```
PsTestFw -CD=QE851 -CP=password -TST=TEST_CMD_LINE -TC=DEFAULT -PFX=Prefix
=QE851_No_Folder -LOG=my_run_log -ACTION=testrun /*The -ACTION parameter is optional*/
1*/
```

The following example explicitly sets connection parameters:

```
PsTestFw -CS=rtdc79637vmc:8643 -CNO=PT_LOCAL -PS=ProxyServer:2345
-PU=mydomain\username -PP=pwd123 -CO=username -CP=password -TST=TEST_CMD_LINE
-TC=DEFAULT -PFX=Prefix =QE851_No_Folder -LOG=my_run_log -ACTION=testrun /*The -ACT⇒
ION parameter is optional*/
```

## Log File

The runtime will generate an output log file in the PTF data directory (C:\Documents and Settings\<user>\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:

```
<runtime>
  <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>Runtime stopped by Runtime.Stop_On_Error: 6/18/2014 4:41:54 PM</Lo⇒
gLine16>
      <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>Runtime stopped by Runtime.Stop_On_Error: 6/18/2014 4:41:55 PM</Lo⇒
gLine45>
      <Status>Failed</Status>
    </Exec3>
    <LogFolder>TEST</LogFolder>
    <LogName>4. PS 2014-06-18 16:41</LogName>
    <Message>Runtime stopped by Runtime.Stop_On_Error: 6/18/2014 4:41:55 PM</Message>
  </Test>
</runtime>
```

## Return Code Option For PTF Command Line Runtime

PTF returns an integer value representing the relative success of the runtime, when called from the command line. The integer value is captured by the calling program.

Sample syntax for capturing PTF's integer return value (into a variable in a sample batch file called iRetCode) might be coded as follows:

```
start /w /MIN PsTestFw -CS=<Environment_server_port> -CNO=<optional_Environment_Nod⇒
e_ID> -CO=<Environment_User_ID> -CP=<Environment_User_Password> -TST=<ShellTest_Nam⇒
e> -TC=<Test Case Name> =<Runtime_options> -LOG=C:\Temp\LOG1.xml set iRetCode=%erro⇒
rlevel% echo %iRetCode%
```

Return values are:

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

## Running a Test on Windows Remote Desktop

If you are running the PeopleSoft Test Framework on a remote host using Windows Remote Desktop (MSTSC), the Chrome or Microsoft Edge opens on the remote host. To avoid failure of a test on the Chrome or Microsoft Edge, consider the following:

- Keep the MSTSC open or maximized and be always connected to the remote host.
- Avoid locking the remote host.
- Avoid moving the mouse cursor on the remote host.

For the proper display of Chrome or Microsoft Edge browsers on the remote host, ensure that the display settings in your client machine is set to 100%.

To set the display:

1. Open the Control Panel of your client machine.
2. Select System, Display.
3. On the Display page, select the Scale and layout value as **100%**.

## Related Links

[Running Tests](#)

---

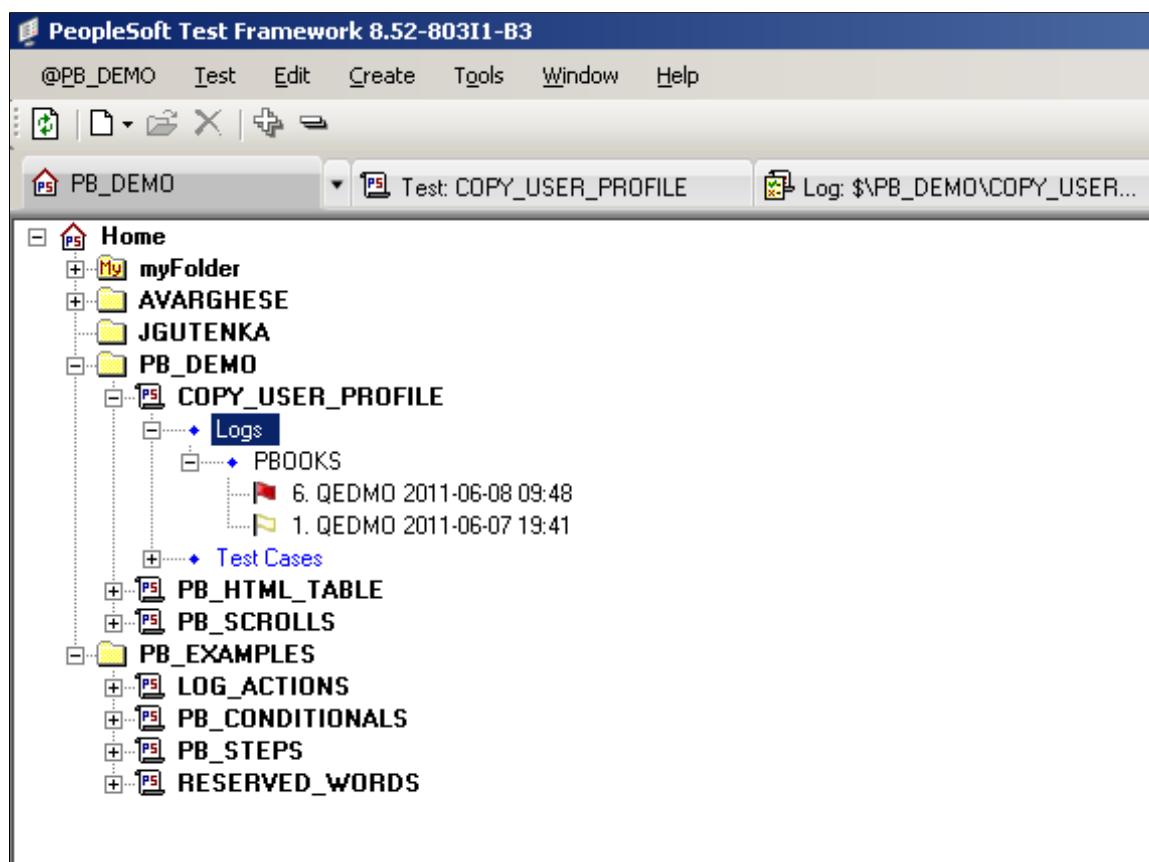
## Reviewing Test Logs

Whenever you run a test, PTF creates a run 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.

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.

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

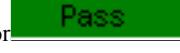
```

[+] └ Frame set to "
  [i] Ignore step 2
  [i] Ignore step 3
  [i] Ignore step 4
  [i] Ignore step 5
  [i] Ignore step 6
  [i] Ignore step 7
  [+] └ Frame set to 'TargetContent'
  [i] Ignore step 9
  [-] └ Page.Prompt
    [i] Goto URL
    [i] PsPanelPrompt: Trying to do the following action = update
    [i] Click :#ICAdvSearch [HTMLLink]
    [i] Text Set_Value [Name=PSOPRDEFN_SRCH_OPRID] => QEDMO
    [i] Click :#ICSearch [PushButton]
    [i] Text Set_Value [Name=DERIVED_CLONE_OPRID] => JGDMO
    [i] Text Set_Value [Name=DERIVED_CLONE_OPRDEFNDESC] => Jim's ID
    [i] Pwd Set_Value [Name=DERIVED_CLONE_OPERPSWD] => *****
    [i] Pwd Set_Value [Name=DERIVED_CLONE_OPERPSWDCONF] => *****
  [-] └ Page.Save
    [i] Click :#ICSave [PushButton]
    [!] Msg: | Warning — Replace existing User Id definition for JGDMO? | | This User ID alrea
    [!] LogScreenShot
    [!] ===== PageSave: ERROR =====
  [-] └ Test End: 6/8/2011 9:50:18 AM

```

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:

<b>Field or Control</b>	<b>Description</b>
 or  <b>Info</b>	Information message only.
 or  <b>Info</b>	Information message only.
 or  <b>Pass</b>	Step was successful.

<b>Field or Control</b>	<b>Description</b>
 or 	Step was successful, but with a warning.
 or 	Step failed.
 or 	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](#)

## Exporting Test Logs to XML

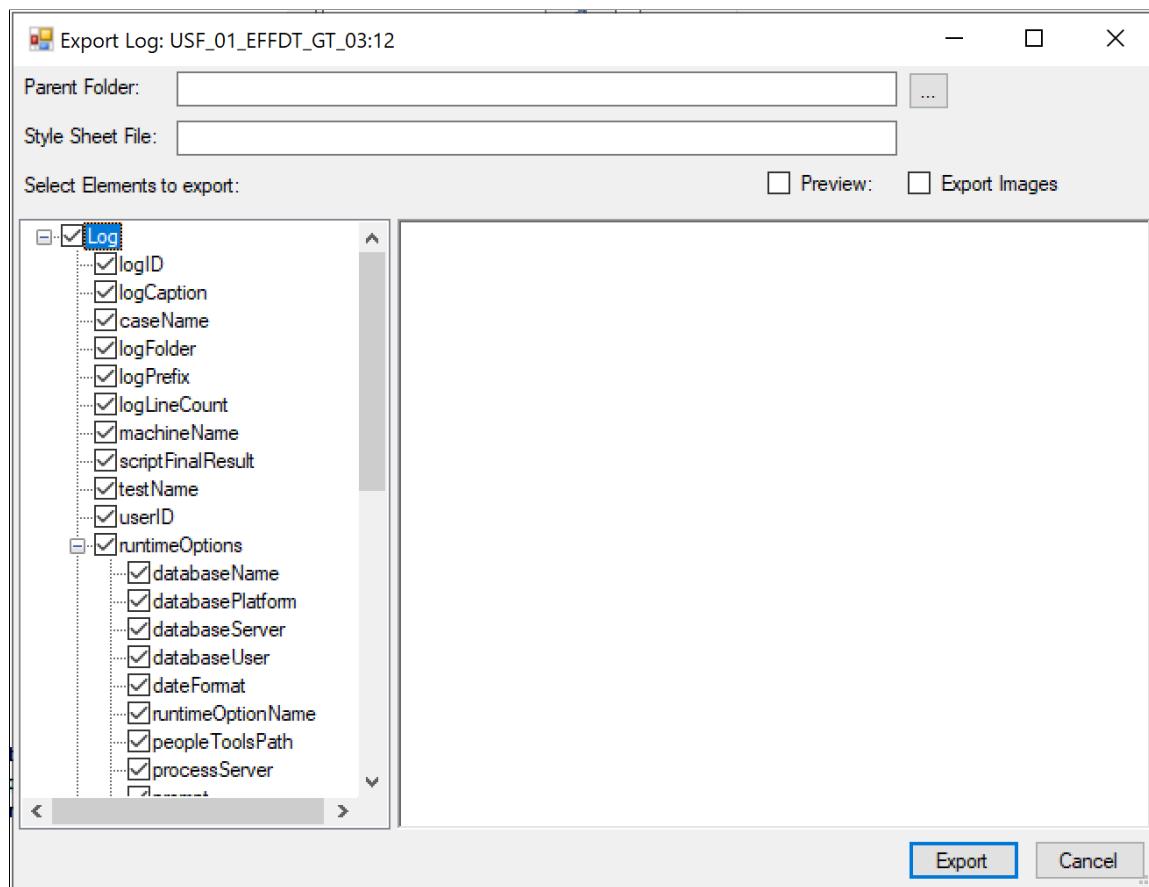
PTF provides the ability to export test logs to XML. Once the logs have been exported to XML, you can compare the results in a text editor, such as Notepad or EditPlus, or view them in most web browsers. You can export all fields, or limit the export to specific fields.

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:

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.

<b>Field or Control</b>	<b>Description</b>
<b>File Path</b>	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.
<b>Select Elements to Export Column</b>	By default all items are selected, click the check box to deselect specific items.
<b>Preview</b>	Select this check box to preview the xml.
<b>Export Images</b>	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 run. For more information, see [Configuring Runtime Options in PTF Client](#).

## Organizing Tests In PTF Explorer

This section discusses how to use PTF Explorer to organize tests.

### 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.



# Developing and Debugging Tests

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## Mapping PSQuery to a Test

You can run an existing test using real-time data. The test will use query results to populate test data. The query results can have real-time data or modified data. You do not have to create a test case each time data changes. Use the **DataLoader** step type to include the modified query results in your tests.

---

**Important!** By default, one DataLoader step type is associated with one query. If you require more than one query for the test, insert respective DataLoader types.

---

## Configuring the DataLoader

Configure the fields on **DataLoader** tab on the Runtime Options dialog box in PTF client. See [DataLoader Tab](#)

## Authorizing to Use the DataLoader

Verify the user included in the **Options** tab of the **Runtime Options** dialog box has access to the *PTPT2200* permission list.

You can assign the QAS Admin role to the user which includes PTPT2200 permission list.

### Related Links

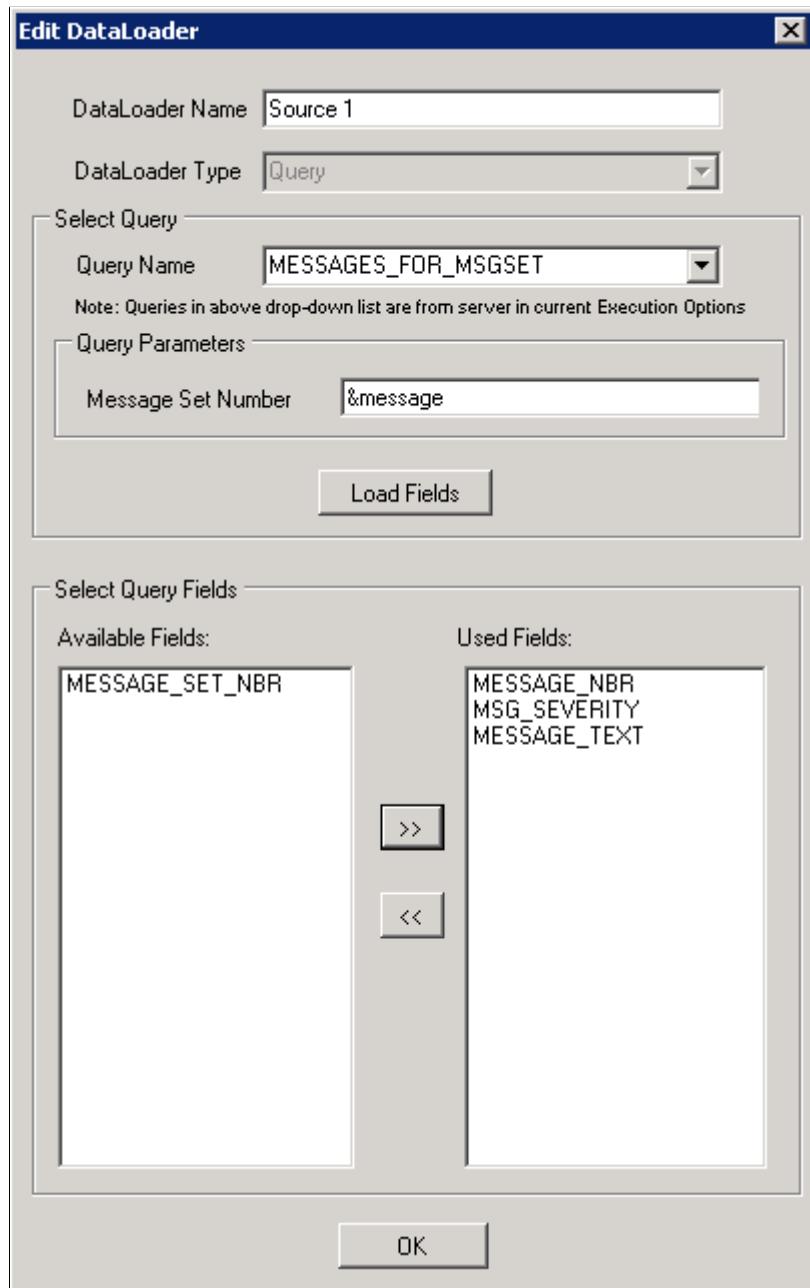
- “Understanding Permission Lists” (Security Administration)
- “Understanding Roles” (Security Administration)

## Editing the DataLoader Step Type

The DataLoader maps a query and the query fields to variables in the test. See [DataLoader](#).

Click the edit button in the **Recognition** field of the step to open the **Edit DataLoader** dialog box.

The example illustrates the fields and controls on the Edit DataLoader dialog box with **Query Parameters** and **Select Query Fields** sections. You can find definitions for the fields and controls later on this page.

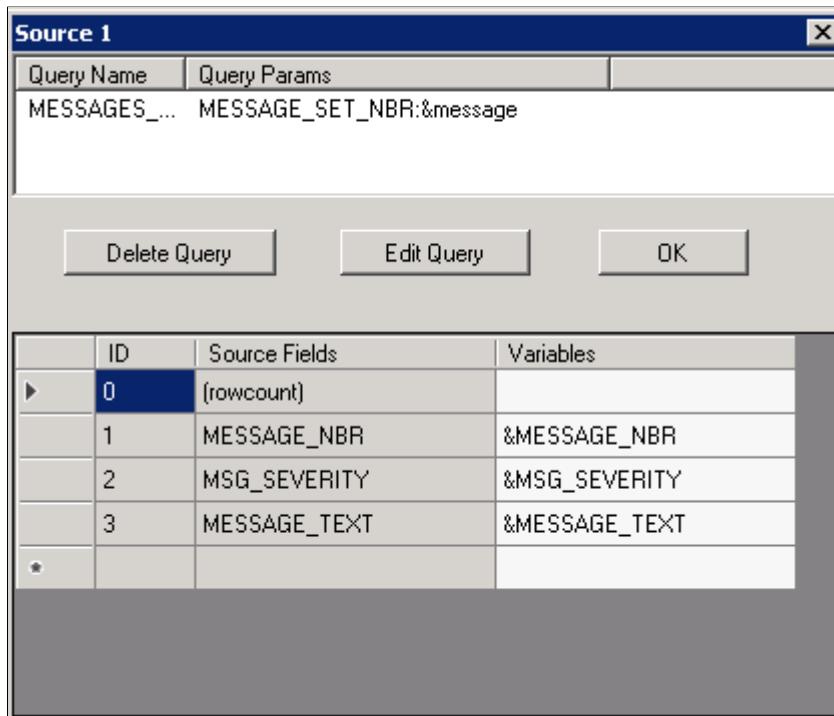


<b>Field or Control</b>	<b>Description</b>
<b>DataLoader Name</b>	Enter an unique name that associates the test with the query.
<b>DataLoader Type</b>	Currently it displays Query and is disabled for change.

<b>Field or Control</b>	<b>Description</b>
<b>Query Name</b>	<p>Select the required query from the drop-down list.</p> <p><b>Note:</b> Queries displayed are according to the Query Security settings associated with your User ID in current Runtime Options.</p>
<b>Query Parameters</b>	Enter the parameter values. The section appears if the selected query has associated parameters.
<b>Load Fields</b>	Click the button to select the query fields from the list of available fields.
<b>Select Query Fields</b>	Displays the fields used in the query. Select and shift required query fields under <b>Available Fields</b> to <b>Used Fields</b> .

When you click the **OK** button on the **Edit DataLoader** dialog box, the variable mapping grid appears where you can edit variable names.

The example illustrates the fields and controls on the variable mapping grid for the DataLoader instance.



You can edit the variable name on the grid for the source fields.

Click the **Edit Query** button to open the **Edit DataLoader** dialog box to edit the query.

---

**Note:** The first row in the variable mapping grid is reserved for the *rowcount* variable which populates the total rows in the query result. The *rowcount* is used for a loop definition. Variable name of the (rowcount) field is blank by default. If you want to use the *rowcount* variable then you must provide a variable name.

## Using the Loop Step Type

You can bind the **Loop** step type to the **DataLoader**. To bind the **Loop** and **DataLoader**, add the variables which are defined in the **DataLoader** into related steps inside the **Loop**. PTF binds them automatically.

The total query result rows is assigned to the *rowcount* parameter which is used for the **Loop** step type.

Consider the following when you use the **Loop** step type with the **DataLoader** step type:

- If *rowcount* related variable is used to control **Loop**, all the steps which are in the **Loop** step type and use the variables defined in the **DataLoader** is run multiple times till the loop count is equal to the number of returned rows of the query.
- If there are duplicate rows in a query result, PTF considers them as different rows and runs twice.

### Example

This example illustrates using the Loop step type with the DataLoader step type.

Type	Action	Recognition	Parameters	Value
DataLoader	Load	name=S6	source=HMAP_EMPL_PHOTO;ownType=public;sourceType=NMQ; rowcount=&rowcount;	
Loop	For	&Idx = 1 to &rowcount		

### Related Links

[Loop](#)

## Limitations of DataLoader Step Type

- **DataLoader** is not supported in a Shell Test.
- One **DataLoader** step type is associated with only one PSQuery, and only standard queries are supported
- Data with hierarchy can not be recognized in current **DataLoader**.
- **DataLoader** doesn't support changing login user during runtime.
- **DataLoader** and **Loop** must be defined in the same test.
- Bind a **Loop** step type with a **DataLoader** step type. The **Loop** uses variables defined in the **DataLoader**. Variables from different **DataLoader** step types cannot be used within the same loop. Assign the value of a variable from a different **DataLoader** step type to a new variable associated with the **Loop**.

- If a date field is used as a prompt, the *FieldValue* must be entered as *YYYY-MM-DD* in the QASrun request.
- The query parameter name in DataLoader Editor is limited to 20 characters, if the length of parameter name is larger than 20, it will be truncated and suspension points will be added at the end.

## Using Step Information

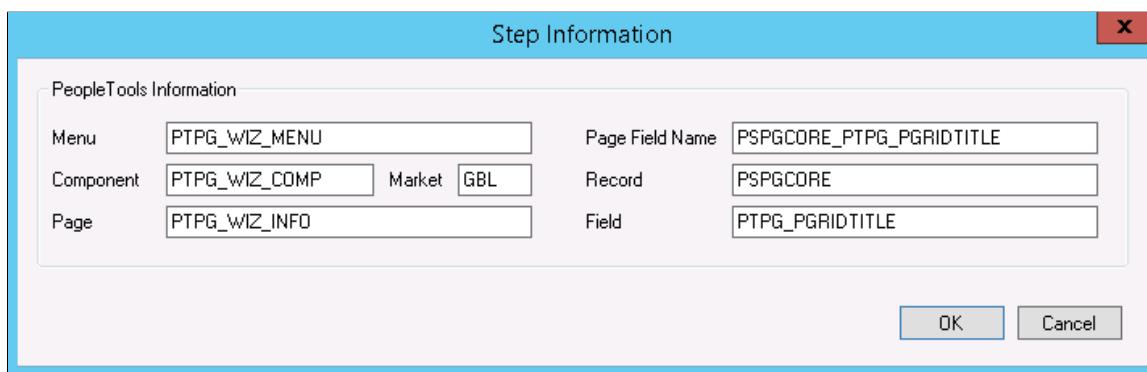
The Step Information, which is PeopleTools meta data, is used to identify the impact on existing test steps and to generate maintenance report.

You can access the Step Information dialog box from the Step Information icon available on the test window toolbar. See, [Test Window Toolbar](#).

The Step Information dialog box:

- Identifies individual commands impacted during application development.
- Displays PeopleTools meta data information such as the menu, page, record, and field.
- Updates step information using the data from the environment on which the tests are run.

The example illustrates the Step Information dialog box.



PeopleSoft Test Framework will update incorrect step information according to the data in the environment on which the tests are run. Select the **Overwrite Existing Step Info** check box in the Runtime Options—Advanced tab to enable the feature.

Step information is updated only for successful steps.

Note the following details regarding step information:

- For test cases created manually, the step information for each step is left blank.  
The step information is displayed in the dialog box if the step run is successful, and remains empty if the run fails.
- For test cases created using PTF Test Recorder, the step information for each step is populated during recording.

The step information gets updated if the step run is successful, and the original step information is retained if the run fails.

- In case of a nested test, a single step in the parent step, the step information is similar to any other stand-alone test cases.

The step information of a nested test is updated and saved even if there is a failed step in the parent test.

## Related Links

[Configuring Runtime Options in PTF Client](#)

[Configuring Runtime Options in PeopleSoft Internet Architecture](#)

---

## 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 run.

Reserved words are useful when data is not known before the test is run. 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:

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 run, as shown in this example:

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

Text	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:

This example illustrates a step that sets a value.

Text	<input type="button" value="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:

This example illustrates a step that verifies a value.

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

## Related Links

[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 run.

Variables are always prefixed by an ampersand (&) – 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 run, 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:

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

Text	Get_Property	ID=GM_PROP_ID	prop=Value.ref=&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.

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:

Recognition	Expect Result
&MyVar=&PriorVar	Contents of the &PriorVar variable

<b>Recognition</b>	<b>Expect Result</b>
&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”“

## Displaying Variables in Message Logs

You can log variables instead of variable values as a message in a test run log.

To log a variable, prefix an additional ampersand (&) to the variable in the Recognition field of the selected test step.

Similarly, you can prefix an ampersand to variable string in the Value field so that the variable is displayed in the details section of the message log.

For example, set “`&&adsname`” is my dataset in the Recognition and Value field. When the test run log is generated, the variable string “`&adsname`” is my dataset is logged as a message.

This example illustrates how an additional ampersand (&) can be prefixed to variables in test steps to print the variable string in message logs.

Type	Action	Recognition	Parameters	Value
Log	Message	“ <code>&amp;&amp;adsname</code> ” is my dataset		detail- “ <code>&amp;adsname</code> ” is my dataset

This table shows examples of setting a variable (`&adsname`) in the Recognition field and the expected result in the message log:

<b>Recognition</b>	<b>Expected Result</b>
<code>&amp;adsname</code> is my dataset	PIVOTGRID_DEFINITION is my dataset
<code>&amp;&amp;adsname</code> is my dataset	<code>&amp;adsname</code> is my dataset
“ <code>&amp;&amp;adsname</code> ” is my dataset	“ <code>&amp;adsname</code> ” is my dataset
““ <code>&amp;&amp;adsname</code> ”” is my dataset	““ <code>&amp;adsname</code> ”” is my dataset
“““ <code>&amp;&amp;adsname</code> ””” is my dataset	“““ <code>&amp;adsname</code> ””” is my dataset

## Related Links

- [Log](#)
- [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>
CONCAT("&MyVar = "   &MyVar)	&MyVar = Hello
SUBSTR("Hello"   1   5 )	Hello
SUBSTR("""Hello """  1   7 )	"Hello"
INSTR("Hello"   "e" )	2
INSTR("""Hello""""  "e" )	3
INSTR(""""Hello""""   ""e""")	0
INSTR(Hello   e )	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 run can use them.

Persistent variables are stored in the database keyed by runtime 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.

<b>Field or Control</b>	<b>Description</b>
	The test properties icon is located in the Test information group box.

3. Set the Variable Action field.
  - None (default). The test will not use persistent variables. All variables set in the test are only global to the current test run.
  - 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 Runtime Options. You can set the Advanced Options in the PTF client or PIA.

See [Configuring Runtime 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 > PTF Persistent Variables**

This example illustrates the fields and controls on the Manage Persistent Variables page.

The screenshot shows a web-based application titled "Manage Persistent Variables". At the top, there is a toolbar with links for "Personalize", "Find", "View All", and navigation buttons for "First", "1-2 of 2", and "Last". Below the toolbar is a table titled "Persistent Variables" with the following columns: "Runtime Opt Name", "User ID", "Machine Name", "Variable Name", and "Value". There are two rows in the table:

Runtime Opt Name	User ID	Machine Name	Variable Name	Value
<input type="checkbox"/> RTO_01	PS		&ROLE	ADS Designer
<input type="checkbox"/> RTO_01	PS		&USERID	PTINT

At the bottom of the table area are three buttons: "Select All", "Clear All", and "Delete Selected".

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 runtime 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 Runtime 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.

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=PSOPRDEFN_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_WW_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 the run.

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:

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



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:

This example illustrates the steps necessary for the conditional logic.

Image	Get_Property	Name=DERIVED_IC_GBL_BRA\$Img	prop=alt;ret=&flagstate	
Conditional	If_Then	&flagstate="Expand section Brazil"		
Image	Click	Name=DERIVED_IC_GBL_BRA\$Img		
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:

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.

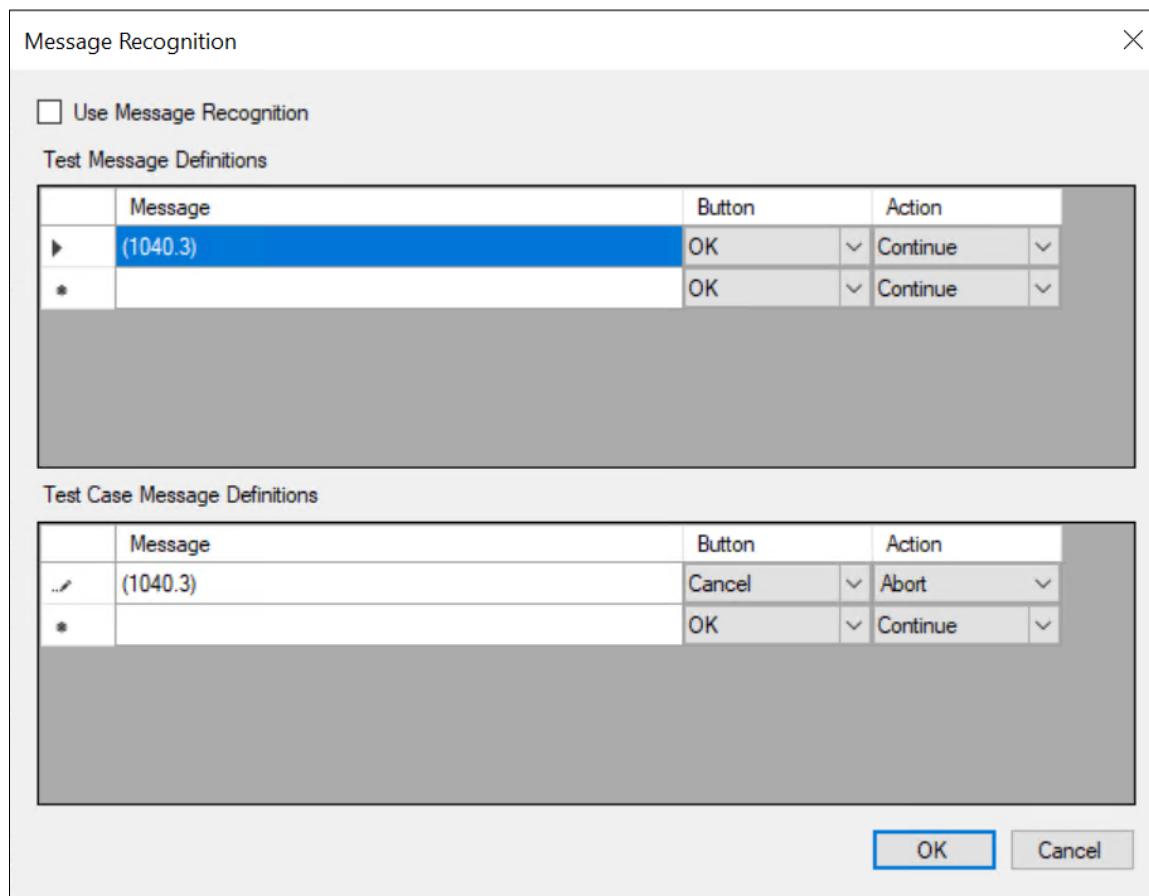
This example shows the Message Recognition dialog box. In this example when the application message (1040,3) error occurs, PTF will click the *Cancel* button and abort the test execution.

---

**Note:** Test case message definitions take precedence over test message definitions.

---

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.



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

<b>Field or Control</b>	<b>Description</b>
<b>Message</b>	<p>Enter the message, or portion of the message, displayed by the error. For example, you might use the Message Catalog numbers.</p> <hr/> <p><b>Note:</b> In Fluid pages, message recognition using message numbering is not available. You can use a portion of the <i>short message text</i> to recognize message boxes.</p>

<b>Field or Control</b>	<b>Description</b>
<b>Button</b>	<p>Enter the button that PTF should click when it encounters the message.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> <li>• <i>OK</i></li> <li>• <i>Abort</i></li> <li>• <i>Retry</i></li> <li>• <i>Ignore</i></li> <li>• <i>Yes</i></li> <li>• <i>No</i></li> <li>• <i>Cancel</i></li> </ul>
<b>Action</b>	<p>Select the action that PTF will take.</p> <p>Valid actions are:</p> <ul style="list-style-type: none"> <li>• <i>Continue</i>: Log an Info message and continue processing.</li> <li>• <i>Abort</i>: Log a Fail message and stop test execution.</li> </ul>

---

## 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. 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 Browser Settings</a>.</p>

<b>Status</b>	<b>Message</b>	<b>Description</b>
Fail	<p>Object not found in the page, or access is denied to the Frame.</p>	<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 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 browser's in-built element inspector.</li> </ul> <p>See <a href="#">Recording Tests</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>
Fail	<p>The test was updated by another user, and it is not possible to save it.</p>	<p>The error is reported when user saves a test while the same test is already saved by another user. This happens when multiple users operate the same test.</p> <p>For example, two users open a test and make some changes. One of the users saves it. Once saved, when the other user saves it, the error displays. In this case, previous changes made by this user are lost. He has to reopen the test and edit it again.</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 free form 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 run 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:

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

User Roles					
		Customize   Find   View All         First  1-10 of 12 Last			
Role Name	Description	Dynamic		View Definition	
PTF Administrator	PTF Administrator		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
PeopleSoft User	PeopleSoft User		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
Portal Administrator	Portal Administrator		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
Portal Manager	Portal Manager		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
QE Role	QE Role		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
XMLP_ADMIN	XMLP Administrator Role		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
XMLP_ANALYZER_EXC	XMLP Excel Analyzer Role		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
XMLP_ANALYZER_ONL	XMLP Online Analyzer Role		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
XMLP_DEVELOPER	XMLP Developer Role		<a href="#">Route Control</a>	<a href="#">View Definition</a>	
XMLP_SCHEDULER	XMLP Scheduler Role		<a href="#">Route Control</a>	<a href="#">View Definition</a>	

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

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	Parameters
	Text	Verify	namme=PSROLEUSER_VW_ROLENAMES\$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\_ROLENAMES) 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.

---

**Note:** You can accomplish all of the steps in this section during recording using PTF Recorder. See [Using the PTF Recorder with Chrome and Microsoft Edge](#)

---

### 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.

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 browser's inbuilt element inspector to get the field value as well.

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:

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.

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 runs 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.

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 check box. You can use the PTF Recorder or the browser's inbuilt element inspector to get its name and position and create a step similar this one:

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:

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	sel
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.

This example illustrates assigning scroll IDs to scroll steps.

Scroll ID	Type	Action	Recognition	Parameters	Value
1	Page	Go_To	Roles		
1	Scroll	Key_Set	Name=PSROLEUSER_VW_ROLENAME	type=Text ret=&Scroll1	PTF Administrator not
1	Scroll	Action		Scroll1 index variable = &Scroll1	
1	Log	Message			
1	Scroll	Key_Set	Name=PSROLEUSER_VW_ROLENAME	type=Text ret=&Scroll1	PTF User sel
1	Scroll	Action			

## Related Links

[Scroll](#)

## Calling Tests

This section provides an overview of calling tests and discusses how to use library and shell tests.

- 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:

- Open an existing test.
- Identify repetitive steps within the test, copy them from the existing test, and paste them into a new test.
- Select the **Library Test** check box on the new test.
- Save the library test.
- 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.
- 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:

- Define the parameters in the library test.
- Assign values to the parameters in the calling test.
- Use the parameters as you would text strings in the library test.

To define parameters in a library test:

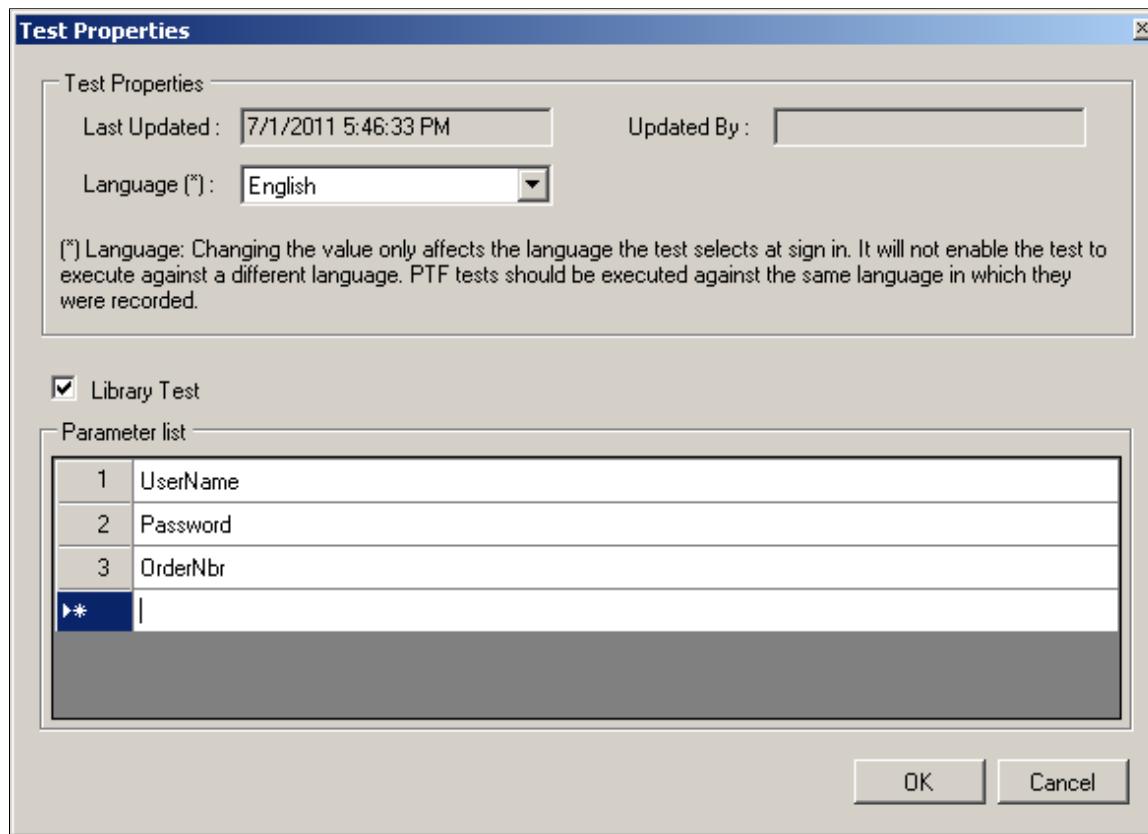
- Select the Library Test check box in the Test Properties dialog box.
- Enter the names of parameters in the Parameter List.

Parameter names can be up to 254 characters, and can contain only letters, numbers, and underscores.

- Click OK to dismiss the dialog box.

The following example shows a parameter list:

This example illustrates the fields and controls on the Test Properties dialog box with a parameter list.



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.

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.

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:** Parameters in library tests need to be assigned a value in the calling test, because variables are not automatically initialized. The parameters without a variable initialized use default PeopleSoft values on the page.

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 would 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:

- Runtime 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.

## Chapter 6

# Administering PTF

---

## Managing PTF Logs

This section describes how to use PeopleSoft test Framework (PTF) Log Manager to manage test logs.

### 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.

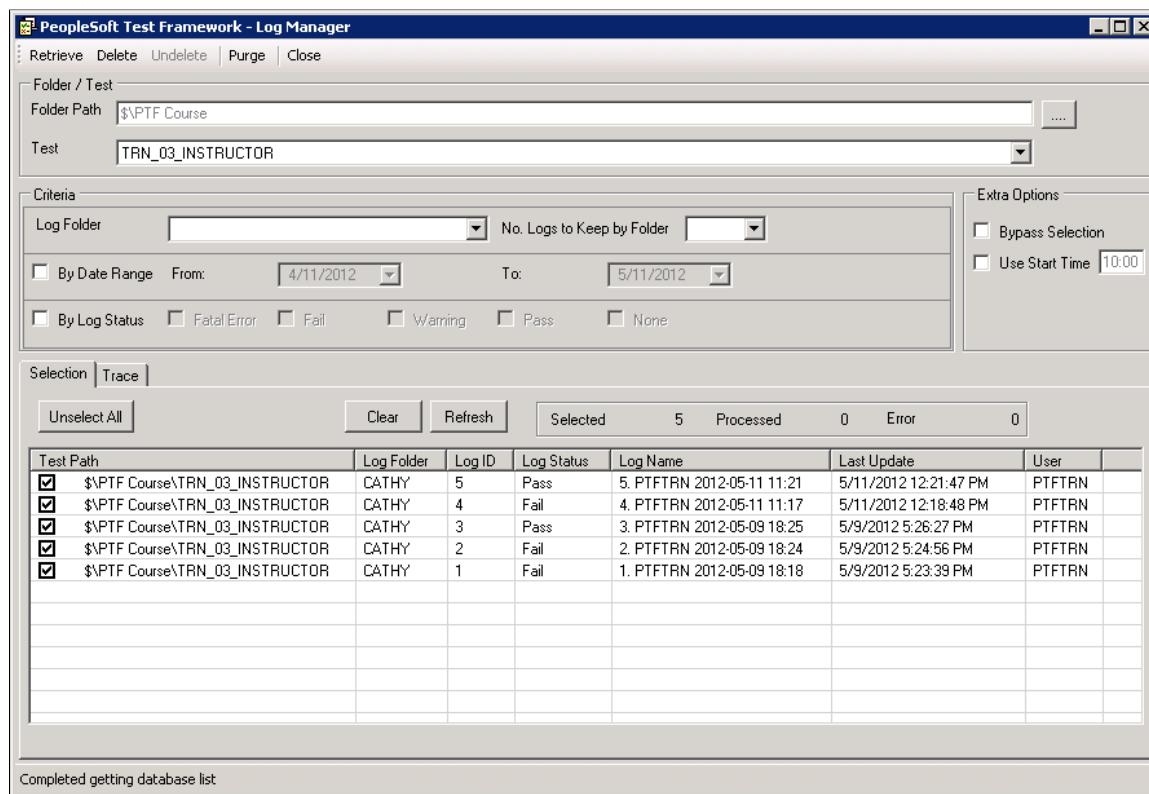
To access the Log Manager, select **Tools > Log Manager**.

---

**Note:** Only an administrator (a user ID with the PTF Administrator role) is able to open Log Manager.

---

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.



## Using Log Manager Toolbar

The log manager toolbar has the following options:

Field or Control	Description
<b>Retrieve</b>	Select to populate the selection pane based on the specified criteria.  <b>Note:</b> The user can cancel the retrieval process at any time by pressing the Abort button, and thus getting a partial result.
<b>Delete</b>	Select to delete the selected logs.
<b>Undelete</b>	Select to cancel logs marked for deletion. When you click <b>Delete</b> , the selected logs are only marked for deletion. They are not removed from the database until you click <b>Purge Log</b> . Until then, you can undelete logs.
<b>Purge</b>	Select to remove selected logs from the database if they are marked for deletion.

<b>Field or Control</b>	<b>Description</b>
<b>Close</b>	Select to close log manager.

## Using Log Manager Fields

Log Manager has these fields:

### Folder / Test

<b>Field or Control</b>	<b>Description</b>
<b>Folder Path</b>	Browse to a folder in PTF Explorer. If a folder is specified, the system retrieves only the logs in that folder, including sub-folders. If no folder is specified, the system retrieves all logs in the environment.
<b>Test</b>	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. If no test is selected then all logs associated with all the tests in the folder path is displayed.

### Criteria

<b>Field or Control</b>	<b>Description</b>
<b>Log Folder</b>	Select a log folder. Log folders associated with the selected test are available in the list.
<b>No. Logs to Keep by Folder</b> (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.
<b>By Date Range</b>	The system retrieves only logs created within the date range.
<b>By Log Status</b>	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

<b>Field or Control</b>	<b>Description</b>
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, and the following buttons:

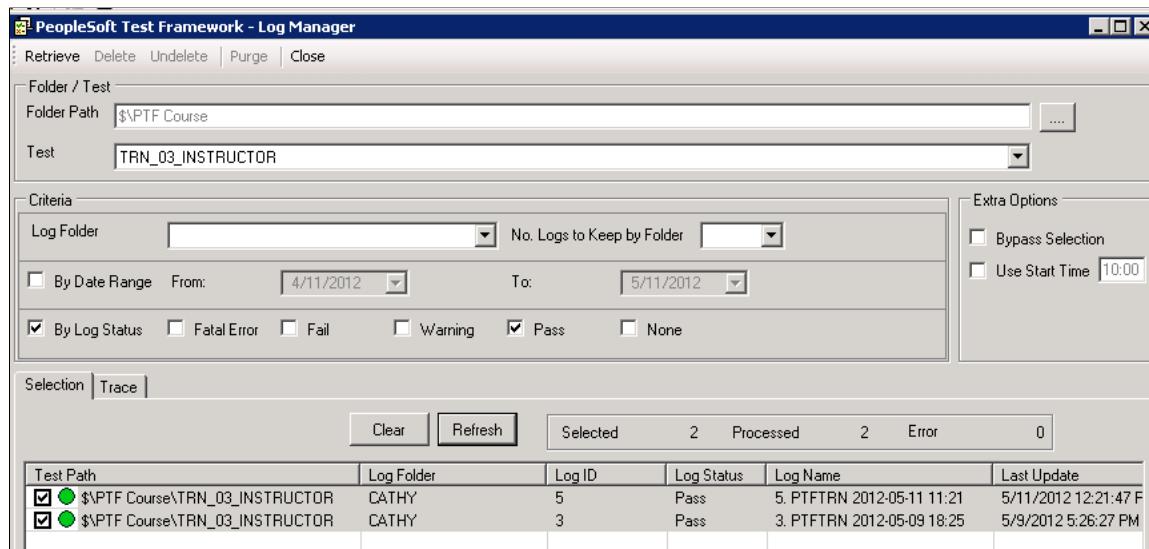
<b>Field or Control</b>	<b>Description</b>
Unselect All	Click to deselect all logs.
Clear	Click to clear the selection list.
Refresh	Click to refresh the selection after changing the criteria.  <b>Note:</b> The refresh is based on the new criteria only. If you change the folder path or test, you must 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.

This example illustrates PTF Log Manager after Purge.



## Using the Trace Pane

The trace pane displays a history of processing actions for this session.

## Upgrading Tests

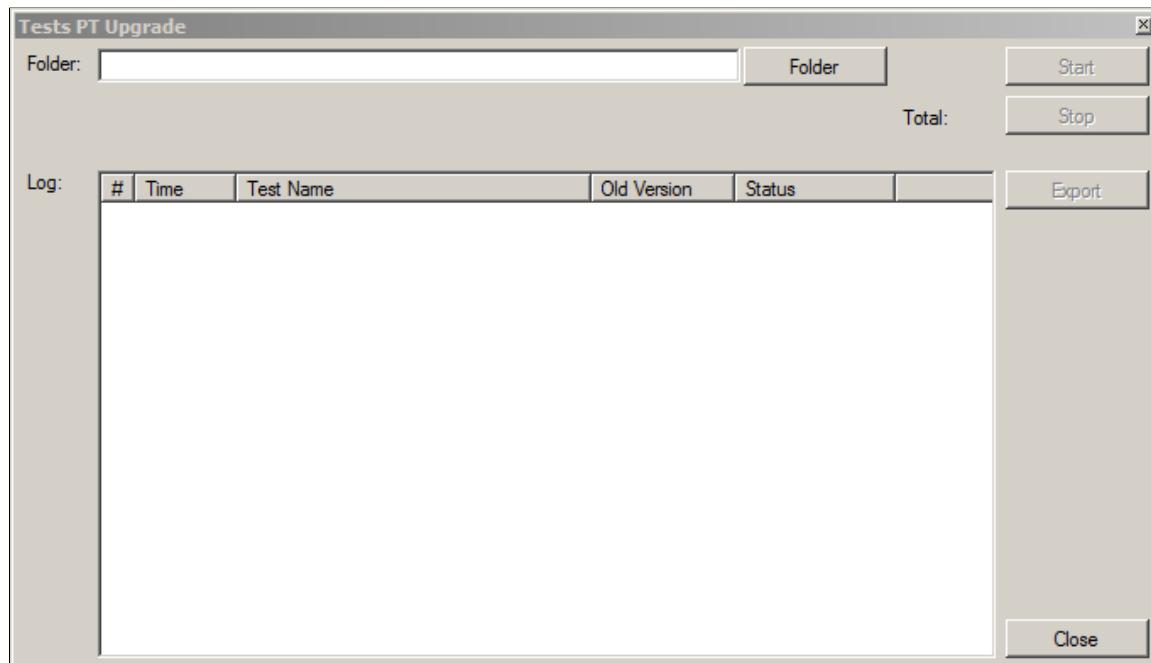
The Tests PT Upgrade tool enables you to update tests from previous versions when you upgrade to a newer version of PeopleTools. When you launch the PTF client, it checks for tests from prior versions, and if they exist, a prompt window appears that enables you to run the upgrade tool. You can run the upgrade tool when prompted, or defer it to a later time. You can upgrade all tests, or just those within a specific folder of the PTF Explorer tree. The Tests PT Upgrade tool makes any necessary syntax changes in the test steps, and then saves the test files. If you defer the upgrade, and you open a test from a prior release, it is automatically updated to the new release at that time.

**Note:** You cannot reverse the upgrade process.

## Using the Tests PT Upgrade Tool

Access the Tests PT Upgrade dialog box (**Tools > Tests PT Upgrade**, or click **Yes** if you are prompted to upgrade tests when you launch the PTF client).

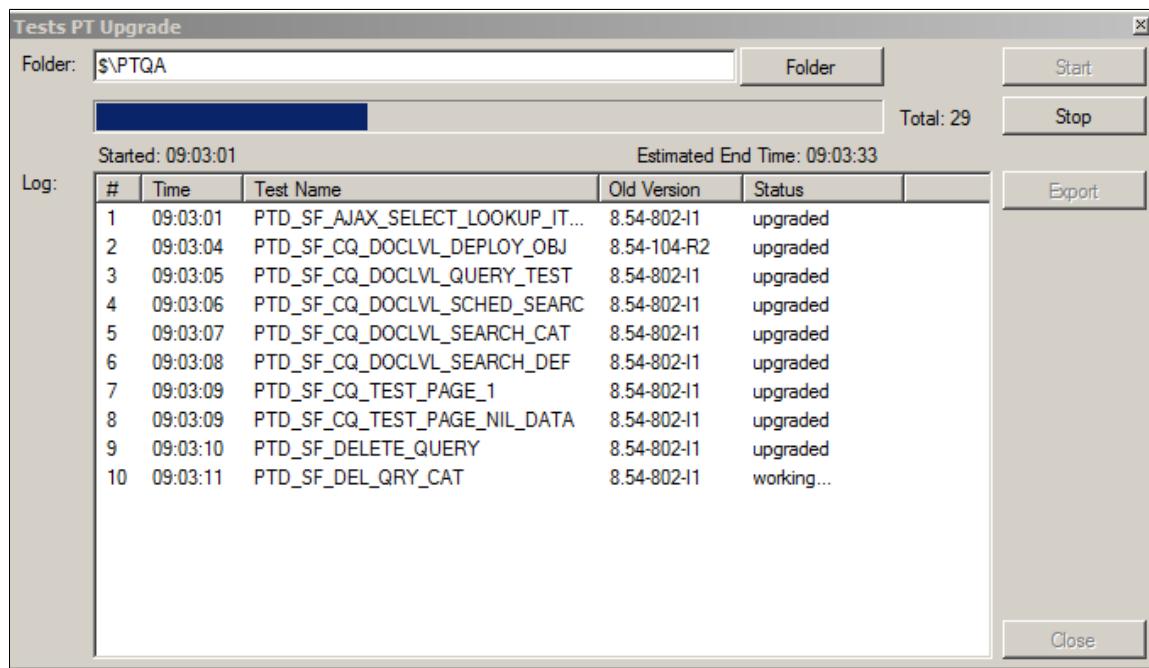
This example illustrates the Tests PT Upgrade dialog box.



<b>Field or Control</b>	<b>Description</b>
<b>Folder</b>	<p>Specify the folder of the PTF Explorer tree that contains the tests you want to upgrade.</p> <p>You can click the <b>Folder</b> button to open a view of the PTF Explorer tree and navigate to the desired folder, or enter the folder path directly into the Folder field. Use the ‘\\$’ characters to indicate the root level of the tree.</p>
<b>Total</b>	<p>After you specify the folder, this lists the number of tests to be upgraded.</p> <p>After you click the <b>Start</b> button, a progress bar appears next to the total, to provide a visual indicator of how many tests have been processed. The start time and an estimated end time appear below the progress bar.</p>
<b>Start</b>	Click to upgrade the tests in the specified folder. This option is not available until the Folder field has been populated.
<b>Stop</b>	Click to interrupt the upgrade process, once it has started. This action is available only after the upgrade process has started.
<b>Log</b>	This grid is populated as tests are upgraded. It lists each test that is updated, the time it was updated, the version it was updated from, and its upgrade status.

<b>Field or Control</b>	<b>Description</b>
<b>Export</b>	Click to save the test upgrade log to a text file.  This action is available only after all tests are upgraded, or when the upgrade process has been stopped.

This example shows the Tests PT Upgrade dialog box during the upgrade process.



## Securing Test Folders Using Permissions

PeopleSoft Test Framework (PTF) restricts user privileges on a test folder for specific PTF roles. Users are required to have appropriate permissions on test folders and its content to perform actions like add, modify, or delete.

### Defining Roles for PTF

PeopleSoft administrator defines new roles for PeopleSoft Test Framework (PTF) from PeopleSoft Internet Architecture.

Assign one of the following PTF permission lists to the role:

- PTF Administrator—PTPT3400
- PTF Editor—PTPT3700
- PTF User—PTPT3600

For a specific test repository only one PTF administrator role is required. The PTF administrator grants privileges to the PTF editor and user roles from the **Test Folder Permissions Manager**.

---

**Note:** There is no privilege granted to a new role by default.

---

## Related Links

Security Administration

[Setting Up Security](#)

## Describing the Permissions on Test Folders

There are three types of privileges, which can be assigned to a role. These privileges allow actions on a test folder and its content. The table describes the actions possible with each privilege.

<b>Privilege</b>	<b>Description</b>
Read/Run	<ul style="list-style-type: none"><li>• Open</li><li>• Run</li><li>• Copy</li></ul>
Modify	<ul style="list-style-type: none"><li>• Open</li><li>• Run</li><li>• Copy</li><li>• Paste</li><li>• Create</li><li>• Modify</li></ul>
Full Control	<ul style="list-style-type: none"><li>• Open</li><li>• Run</li><li>• Copy</li><li>• Paste</li><li>• Create</li><li>• Modify</li><li>• Cut</li><li>• Delete</li><li>• Rename</li></ul>

## Using the Test Folder Permissions Manager

**Note:** The Test Folder Permissions Manager only authorizes actions on the test folder and tests. The test cases cannot be given specific permission but it inherits the same permission as the parent test. You can edit test cases as long as your role has read and run privileges for the parent test.

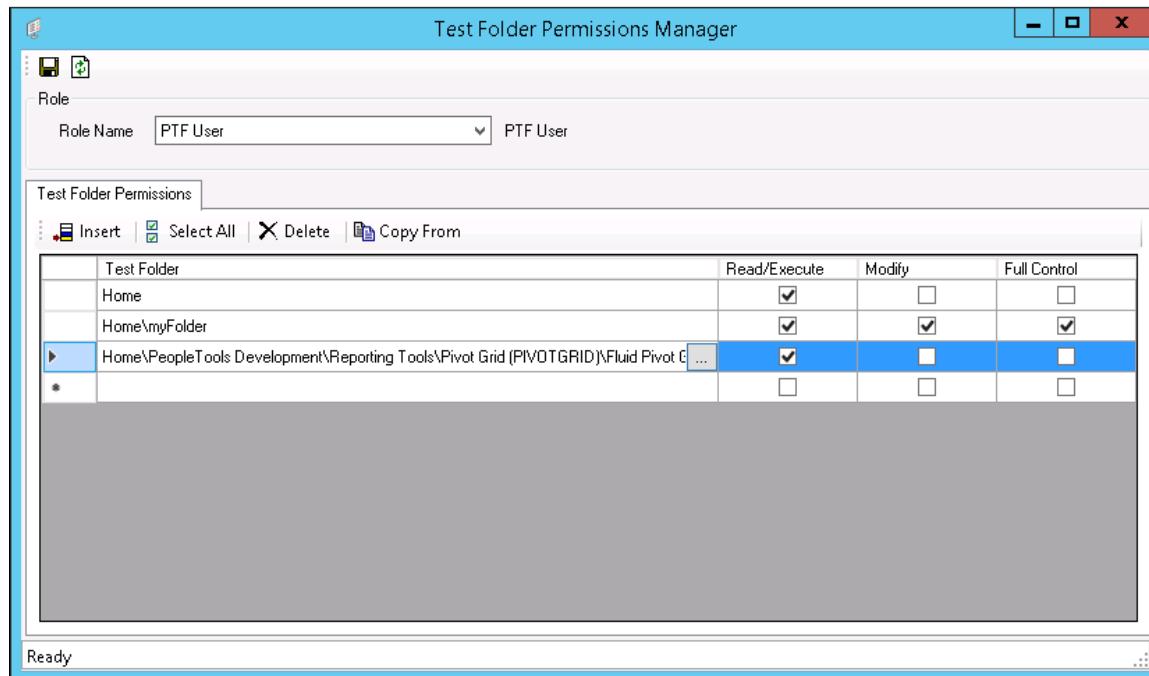
The PTF administrator assigns privileges to these roles from the **Test Folder Permissions Manager**.

Access the **Test Folder Permissions Manager** from the Tools menu in the PTF client. The link under Tools menu is only visible to PTF administrators.

If some test folders are invisible to a specific PTF role, then all the tests under that test folder and the sub folders are also hidden to the users who are assigned the particular PTF role. This is also applicable for PTF command line.

Also see, [Understanding the Messages and Warnings](#).

The example illustrates the fields and controls on the Test Folder Permissions Manager.

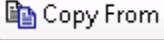


<b>Field or Control</b>	<b>Description</b>
	Saves any modifications to test folder permissions for the current role.
	Refreshes test folder permissions for the current role. A warning message displays if changes are not saved.

## Role

<b>Field or Control</b>	<b>Description</b>
<b>Role Name</b>	Switch to a role to display the test folders and permissions granted to it.

## Test Folder Permissions

<b>Field or Control</b>	<b>Description</b>
 <b>Insert</b>	Insert permissions for a new test folder.
 <b>Select All</b>	Select all the permissions displayed on the grid.
 <b>Delete</b>	Delete test folder permissions for an existing PTF role.
 <b>Copy From</b>	Copy existing test folder permissions from an existing role. The <b>Copy from an existing Role</b> dialog box prompts you to select a folder. A warning message <b>The following Test Folders are duplicated.</b> is displayed, if a folder already exists in your <b>Test Folder Permissions Manager</b> .
 <b>...</b>	Click to display the test folder selection dialog box.

See [Understanding the Messages and Warnings](#) for related messages and warning.

## Understanding the Messages and Warnings

The section explains messages and warnings generated from the **Test Folder Permissions Manager** on an action.

Action	Message	Description
Insert	Test Folder XXX already exists.	When you are selecting a folder or test which already has permissions assigned for the role, and exists in the Test Folder Permissions grid, the message is generated.
Copy From	The following Test Folders are duplicated.	While copying from the <b>Copy from an existing Role</b> dialog box, if the selected test folder already exists in the parent grid, the message is generated.
Delete	Are you sure you want to delete selected Test Folders?	When you want to delete selected rows from the grid, the message is displayed to confirm.
Save	Invalid Test Folder Permission.	If any data is invalid then the message is displayed and the invalid row is highlighted, when you save the test folder permissions.
Refresh	The data are not saved yet. Do you want to continue?	If you refresh the data in the <b>Test Folder Permission Manager</b> or switch to a different role, but the current data is not saved then the message is displayed to confirm.
Run tests from the command line.	Test XXX not found.	If you are running tests from the command line and you do not have permission on a folder or any test within it, the warning is displayed.
Run shell tests from the command line.	Called Test not found.	If you do not have required permissions on a shell test or the folder that includes the shell test, then the system displays the warning.

### Related Links

[Using the Test Folder Permissions Manager](#)

[Running Tests](#)

[Configuring Runtime Options from the Command Line](#)

## Managing Privileges Using Rules

Only the PTF administrator can configure permissions on test folders using the **Test Folder Permissions Manager**. While granting permissions on folders the PTF administrator needs to keep the following rules in mind:

- Test Folder Permission Manager is only available for PTF administrator role.
- Users with same PTF roles have the same privileges for specific test folders.
- Each PTF role may have different privileges on a test folder.
- PTF administrator can configure privileges on *My Folder* like any other folder in PTF.

---

**Note:** Sub folders, tests, and test cases under *My Folder* inherits the permissions configured on the parent folder.

---

- Privileges on a folder are merged for an user who has multiple PTF roles. The role with higher permissions take precedence.
- Test folder permission management does not have any impact on the below scenarios:
  - Updating Step Information after the run completes.
  - Testing PeopleTools upgrade.

## Migrating Test Folder Permissions

Test folder permissions depend on the role and the test folder to which the permission is applied. Migrating roles between PeopleTools upgrades are completed using the application designer. See Lifecycle Management Guide.

Use the DataMover tool to migrate the relationship between role and test folder. See “Understanding PeopleSoft Data Mover” (Lifecycle Management Guide).

### Related Links

[Migrating PTF Tests](#)

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## 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.

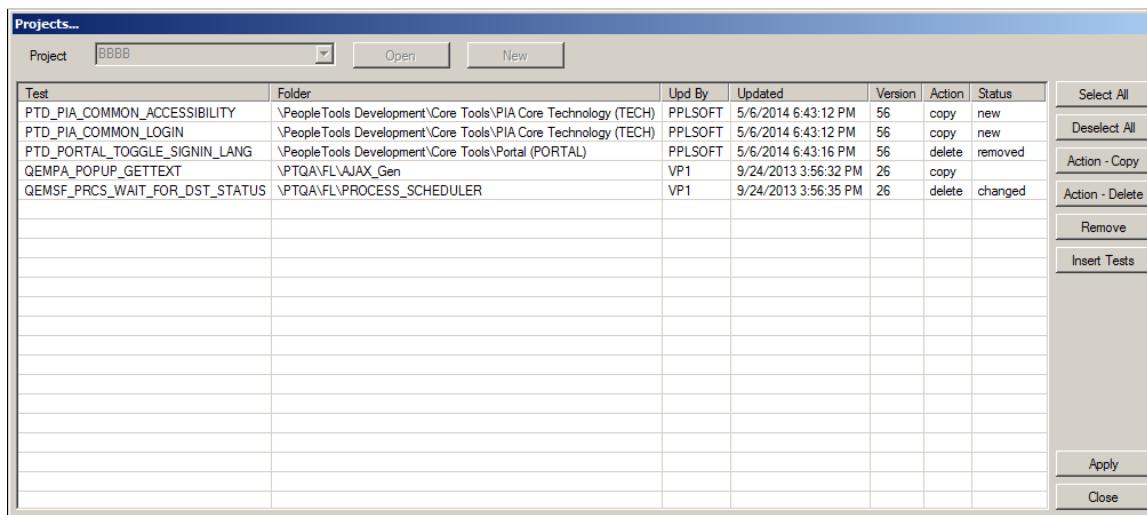
**Note:** This section assumes you are already familiar with Application Designer projects. For detailed information about Application Designer Projects, see [Application Designer Developer's Guide](#).

## 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.

This example illustrates the fields and controls in the Projects dialog box.



Use these fields and controls to open or create a project:

Field or Control	Description
<b>Project</b>	Select a project.
<b>Open</b>	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.
<b>New</b>	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.  <b>Note:</b> 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>Field or Control</b>	<b>Description</b>
<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 <b>Action - Copy</b> or <b>Action - Delete</b> 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>Field or Control</b>	<b>Description</b>
<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” (Application Designer Developer’s Guide)

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## Performing Mass Updates

This section describes how to use the PTF Mass Update tool.

### 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 run 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

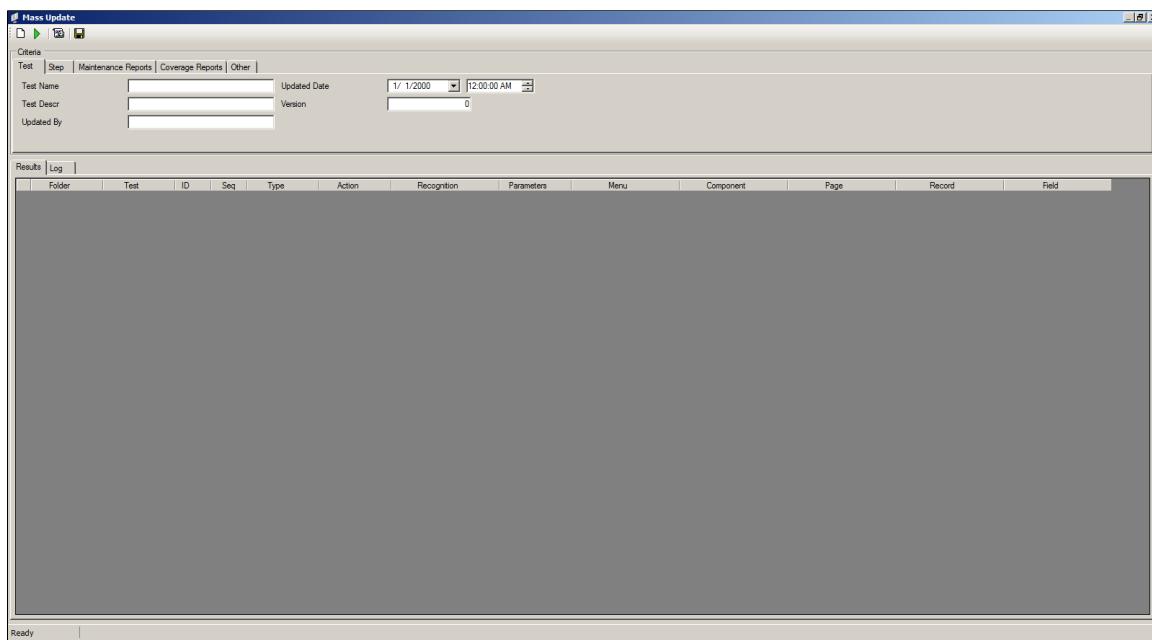
To perform a mass update, complete these steps:

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**.

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:

<b>Term</b>	<b>Definition</b>
	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.

This example illustrates the Results grid after applying the filter.

Mass Update													
Criteria													
Results													
Folder	Test	ID	Seq	Type	Action	Recognition	Parameters	Menu	Component	Page	Record	Field	
PeopleTools De-	PTD_PIVOTGR...	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_PIVOTGR...	22	14	Button	▼ Click	▼ Name=PTORM_NEXT_PB	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_OPT	PTPG_WORKREC	PTPG_NEXT_PB		
PeopleTools De-	PTD_PIVOTGR...	23	15	Page	▼ Save	▼	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	24	16	Span	▼ Click	▼ ID=PT_CHART_SCROLL1...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	25	17	CheckBox	▼ Set_Value	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	26	18	CheckBox	▼ Set_Value	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	27	19	Button	▼ Click	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	28	20	Span	▼ Click	▼ ID=PT_CHART_SCROLL1...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	29	21	CheckBox	▼ Set_Value	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	30	22	CheckBox	▼ Set_Value	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	31	23	Button	▼ Click	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	32	24	Span	▼ Click	▼ ID=PT_CHART_SCROLL1...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	33	25	CheckBox	▼ Set_Value	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	34	26	CheckBox	▼ Set_Value	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	35	27	Button	▼ Click	▼ Name=PT_CHART_SCROLL...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	36	28	Span	▼ Click	▼ ID=PTORM_PREV_PB	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP	PTPG_WORKREC	PTPG_PREV_PB		
PeopleTools De-	PTD_PIVOTGR...	37	29	Radio	▼ Set_Value	▼ Name=PTWRKREC_P...	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_OPT	PTPG_WORKREC	PTPG_DISPLAYOPT		
PeopleTools De-	PTD_PIVOTGR...	38	30	Button	▼ Click	▼ Name=PTORM_NEXT_PB	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_OPT	PTPG_WORKREC	PTPG_NEXT_PB		
PeopleTools De-	PTD_PIVOTGR...	39	31	Page	▼ Save	▼	PTPG_WIZ_MENU	PTPG_WIZ_COMP	PTPG_WIZ_DISP				
PeopleTools De-	PTD_PIVOTGR...	47	32	Browser	▼ FrameSet	▼							
PeopleTools De-	PTD_PIVOTGR...	51	38	Text	▼ Set_Value	▼ Name=PTPG_WORKREC_L...	PTPG_WIZ_MENU	PS_PG_VIEWER	PTPG_PSPGVIEWER	PTPG_WORKREC1	PTPG_PGRIDNAME		
PeopleTools De-	PTD_PIVOTGR...	52	39	Button	▼ Click	▼ Name=PTPG_WORKREC_L...	PTPG_WIZ_MENU	PS_PG_VIEWER	PTPG_PSPGVIEWER	PTPG_WORKREC1	PTPG_SRCH_BTN		
PeopleTools De-	PTD_PIVOTGR...	53	40	Link	▼ Click	▼ Name=PTPG_NEW_BTN@0	PTPG_WIZ_MENU	PS_PG_VIEWER	PTPG_PSPGVIEWER	PTPG_WORKREC1	PTPG_VIEW_BTN		
PeopleTools De-	PTD_PIVOTGR...	54	41	Browser	▼ FrameSet	▼ pModFrame_#							
PeopleTools De-	PTD_PIVOTGR...	55	43	CheckBox	▼ Set_Value	▼ Name=PTGMLVWBPPTP...	PTPG_WIZ_MENU	PTPG_VIEWER	PTPG_PGVIEWER	PTPGWORKREC			
PeopleTools De-	PTD_PIVOTGR...	59	48	Link	▼ Click	▼ innerText=Pivot Grid Adm...							
PeopleTools De-	PTD_PIVOTGR...	60	49	Browser	▼ FrameSet	▼ TargetContent							

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.

Term	Definition
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:

<b>Term</b>	<b>Definition</b>
Find	Select the Find tab to find test step data.
Replace	Select the Replace tab to find and replace test step data.

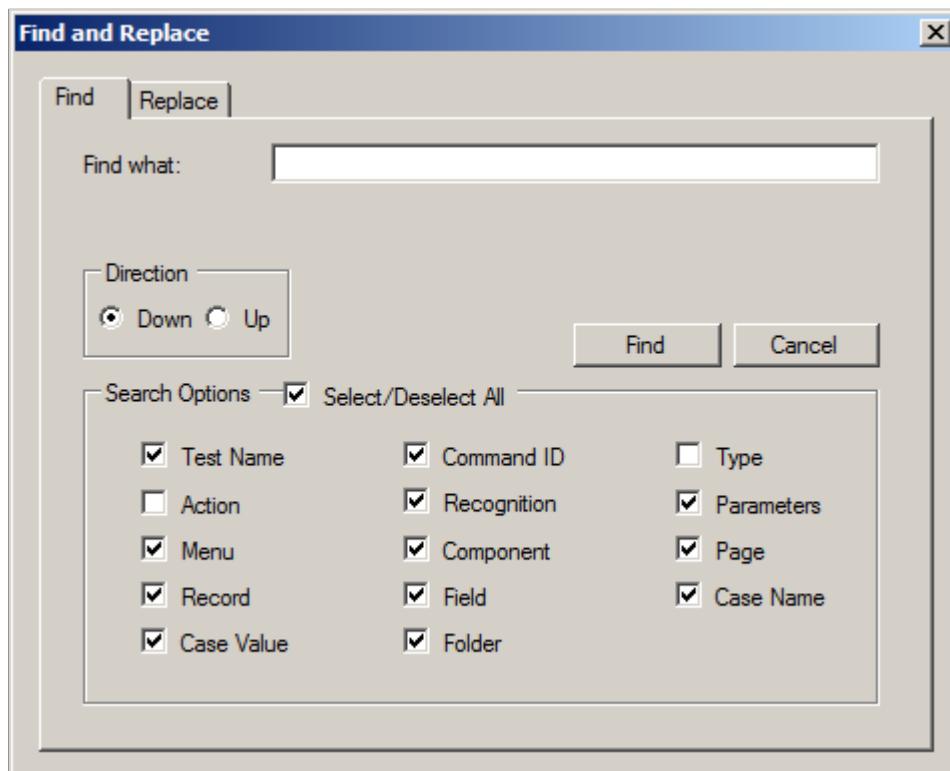
### Finding Test Step Data

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.

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. To specify the search direction, select **Down** or **Up**; the default is **Down**.

5. Click **Find** to find the next match.

Review each step and make any modifications needed.

6. Continue to click **Find** 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.

7. Click the Save icon on the Mass Update toolbar to save your changes.

## Replacing Test Step Data

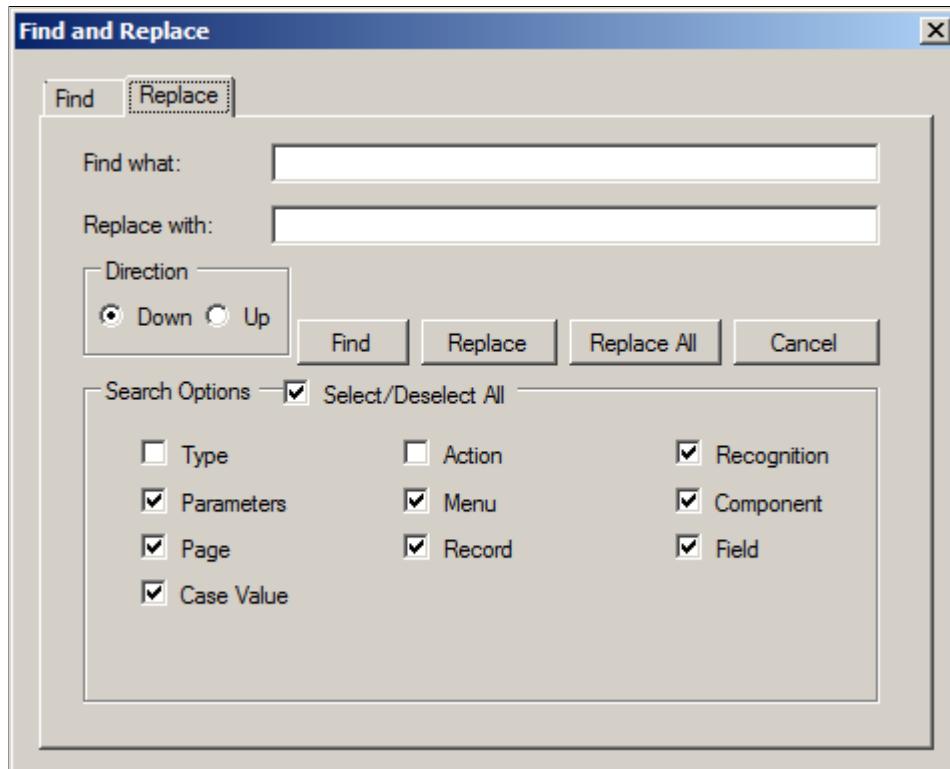
To replace test step data:

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.

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 specify the search direction, select **Down** or **Up**; the default is **Down**.

7. 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.

8. To review each match, click **Find**.

Either click **Find** to move to the next match without making any changes, or click **Replace** then **Find** to change the value and move to the next match.

Continue to click **Find** 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.

9. Click the Save icon on the Mass Update toolbar to save your changes.

# Identifying Change Impacts

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## 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 additional 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 > Configure PTF Analysis Rules**

This example illustrates the fields and controls on the Define Analysis Rules 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:

Analysis Category	Description
M01	Menu does not exist
M02	Component deleted from Menu
M03	Component added to Menu
C01	Page deleted from Component

<b><i>Analysis Category</i></b>	<b><i>Description</i></b>
C02	Page added to Component
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

<b>Analysis Category</b>	<b>Description</b>
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

The tasks for Step 1 only to be run once for the change project.

The first step in creating a test maintenance report is comprised of 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).

This example illustrates the fields and controls on the Create Test Maintenance Report Wizard: Step 1 of 4.

**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      **Process Monitor**

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.

---

**Note:** 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:

This example illustrates the fields and controls on the Create Test Maintenance Report Wizard: Step 2 of 4.

Select a Compare Report to Analyze				
Project Name	Compare Date/Time	Compare Type	Status	Analysis Date/Time
PTUVIEW	09/10/2019 5:17:35PM	From File	Analyze	Success 11/05/19 12:34:35AM
CHANGES_TO_RCF_DEFINITION	09/10/2019 5:17:35PM		Analyze	

For a given change project the tasks for Step 2 only need to be run 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 in Process Scheduler.

---

**Note:** A pop-up appears stating that the request is submitted to Process Scheduler. Click OK to proceed.

---

3. You can click the Process Monitor link or check the Status column to know the progress of the Application Engine program.
4. When the analysis is complete, the Status column shows Success or Fail. 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:

This example illustrates the fields and controls on the Create Test Maintenance Report Wizard: Step 3 of 4.

Please select a project.		Find	View All	First	1 of 1	Last	Delete
Project Name	Compare Date/Time						
PTUVIEW	09/10/2019 5:17:35PM	11/05/2019 12:34:35AM					<input type="checkbox"/>

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:

This example illustrates the fields and controls on the Create Test Maintenance Report Wizard: Step 4 of 4.

Select Test(s) for Test Maintenance Report		Find   View All       First  1 of 1  Last
Test Parent Folder	Test Name	Description
<input checked="" type="checkbox"/> \PeopleTools Development\Analytic Tools\Analytic Engine (ACE)	PTD_ACE_ACCESS_CUBE_FILTER	

Select All    Clear All

**Generate Report**

Generate Report    Success    Instance 2865

[View PIA Report](#)    [View PDF 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.

This will launch the Application Engine program PSPTMAINTRPT in Process Scheduler.

The following fields are on the Create Test Maintenance Report Wizard: Step 4 of 4 page:

<b>Field or Control</b>	<b>Description</b>
<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 <b>Select Test(s) for Test Maintenance Report</b> grid with the tests that match the criteria specified.
<b>Select All</b>	Click to select all tests that are listed in the <b>Select Test(s) for Test Maintenance Report</b> grid.
<b>Clear All</b>	Click to deselect all tests that are listed in the <b>Select Test(s) for Test Maintenance Report</b> grid.
<b>Generate Report</b>	Click to create the report.
<b>Process Monitor</b>	Click to check the progress of the Application Engine program PSPTMAINTRPT.  <b>Note:</b> The run details, such as run status and process instance, are displayed on the Wizard after you click Generate Report.
<b>View PIA Report</b>	Click to view the report in the application browser.  This link is enabled after the report is created.
<b>View PDF Report</b>	Click to view a PDF report.  This link is enabled after the report is created.

## 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 .

This example illustrates a test maintenance report in PI Publisher format.

Test Maintenance Report Project Name SA_PROJ_SNAP_852					
Test Name: INSTRUCTORS					
2 - Medium	F01F Field	INTERNAL_EXTERNAL <b>Changed</b>			
2 - Medium	F04F Field	Step ID: 31 Seq. Nbr: 31 Status: Active Language: EN Pre Object Value: INTERNAL_EXTERNAL Post Object Value: INTERNAL_EXTERNAL.Character			
2 - Medium	P01F Page	INTERNAL_EXTERNAL <b>Changed</b>			
2 - Medium	P05F Page	PSU_INSTR <b>Deleted</b>			
2 - Medium		Step ID: 32 Seq. Nbr: 32 Status: Active Language: EN Pre Object Value: PSU_INSTR_TBL.MANAGER Post Object Value:			
2 - Medium		PSU_INSTR <b>Changed</b>			
2 - Medium		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			
Test Name: RESERVED WORDS					
2 - Medium	C01F Component	PSU_STUDENT GBL <b>Deleted</b>			
2 - Medium	C01F Component	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 GBL <b>Deleted</b>			
2 - Medium	C01F Component	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 GBL <b>Deleted</b>			
2 - Medium	C01F Component	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 GBL <b>Deleted</b>			
2 - Medium		Step ID: 13 Seq. Nbr: 8 Status: Active Language: ENG Pre Object Value: PSU_STUDENT_SKED Post Object Value:			

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	PSU_INSTR_TBL.MANAGER	Field Label changed on Page
STUDENTS	2 - Medium	P003	Pages	PSU_STUDENT_PERS			0	0	Active Added		PSU_STUDENT_TBLPHONE	Field added to Page (Compare Type File)
TRN_STUDENT_04	2 - Medium	P003	Pages	PSU_STUDENT_PERS			0	0	Active Added		PSU_STUDENT_TBLPHONE	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:

This example illustrates a test maintenance report that has been downloaded in spreadsheet format.

	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	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	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)

This example illustrates a test maintenance report in the PTF Client.

**Maintenance Report**

Test Name:	INSTRUCTORS	Project Name:	SA_PROJ_SNAP_852																																													
Run Date/Time:	7/22/2011 9:40:05 PM	Analysis Seq:	1																																													
Run Date/Time:		DateTime Stamp:																																														
<table border="1"> <thead> <tr> <th>AnalysisCategory</th> <th>Priority</th> <th>Step ID</th> <th>LanguageCode</th> <th>SeqNbr</th> <th>CommandStatus</th> <th>ObjectType</th> <th>ObjectDescription</th> <th>ObjectName</th> </tr> </thead> <tbody> <tr> <td>P01F</td> <td>2</td> <td>32</td> <td>EN</td> <td>32</td> <td>A</td> <td>5</td> <td>Page</td> <td>PSU_INSTR</td> </tr> <tr> <td>P05F</td> <td>2</td> <td>11</td> <td>EN</td> <td>11</td> <td>A</td> <td>5</td> <td>Page</td> <td>PSU_INSTR</td> </tr> <tr> <td>F01F</td> <td>2</td> <td>31</td> <td>EN</td> <td>31</td> <td>A</td> <td>2</td> <td>Field</td> <td>INTERNAL_EX</td> </tr> <tr> <td>F04F</td> <td>2</td> <td>31</td> <td>EN</td> <td>31</td> <td>A</td> <td>2</td> <td>Field</td> <td>INTERNAL_EX</td> </tr> </tbody> </table>				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
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F01F	2	31	EN	31	A	2	Field	INTERNAL_EX																																								
F04F	2	31	EN	31	A	2	Field	INTERNAL_EX																																								
<input type="button" value="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 (PSPTTSTCOVERAGESEL) to select the projects to include in the test coverage report.

Navigation:

**PeopleTools > Lifecycle Tools > Test Framework > Create Test Coverage Report**

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.

Select a Project for the Test Coverage Report		
	Project Name	Project Description
1	QE854_903I1	Increm Proj for QE8.54_903I1
2	PTFTLSPROJ	
3	PPLDELETE	Deleted PeopleTools Objects
4	PPLTLS84CUR	Composite PeopleTools Maintena
5	PPLTOOLS	Composite PeopleTools Project
6	PT854_903I1	Increm Proj for PT8.54_903I1
7	QEDMO854	Comp Proj for QE8.54
8	QEDMOALL	Composite QE Project
9	QE_ASIVADAS_854_903I1	
10	PT854_902R1	Increm Proj for PT8.54_902R1
11	QE854_902I1	Increm Proj for QE8.54_902I1
12	PTPCRECOMPILE	
13	PT854_902I1	Increm Proj for PT8.54_902I1
14	QE854_901R1	Increm Proj for QE8.54_901R1
15	PT854_901R1	Increm Proj for PT8.54_901R1

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:

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

Project Name PT854\_901R1

Last Update Date/Time 04/14/2014 4:10:34PM

Folder

Search For Tests By

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
<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
<input type="checkbox"/>	\PeopleTools Development\Porting, Database and Platform\Automated Config Manager (ACM)	PTD_ACM_TEMPLATE_RUN
		ACM Template Creation
		ACM Template Run Configuration

Find | View All |  1-6 of 6

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>Field or Control</b>	<b>Description</b>
<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>	<p>Select <i>Name</i> to search for reports by test name, or <i>Desc</i> to search for reports by their description.</p> <p>Enter the search string in the adjacent edit box. To retrieve all reports, leave the edit box blank.</p>
<b>Search</b>	Click to populate the <b>Select Test(s) for Test Coverage Report</b> grid with the tests that match the criteria specified.
<b>Select All</b>	Click to select all tests that are listed in the <b>Select Test(s) for Test Coverage Report</b> grid.
<b>Clear All</b>	Click to deselect all tests that are listed in the <b>Select Test(s) for Test Coverage Report</b> grid.
<b>Report Format</b>	<p>Select the report output format. Options are:</p> <ul style="list-style-type: none"> <li>• <b>PIA</b> - View the report in the application browser.</li> <li>• <b>XML Publisher</b> - Create an XML formatted text file.</li> </ul>
<b>Usage Monitor Rpt</b>	<p>Select to include Usage Monitor data in a test coverage report. You need to generate Usage Monitor data while creating your tests.</p> <p>See <a href="#">Using Usage Monitor Data with PTF</a>.</p>
<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 run 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 Usage Monitor before you use Usage Monitor with PTF.

See *PeopleTools: Usage 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 Test 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.

---

**Note:** The manual steps of starting and stopping the Usage Monitor are included here during the recording process to capture them in the PTF test. PTF does not have to be in record mode to generate Usage Monitor data.

---

The PSPTUMPMTAGR table has the Usage Monitor data.

---

**Note:** For any Usage Monitor data to appear in the table, 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, LifeCycle Tools, Lifecycle Tools Options).

---

To verify that Usage Monitor is collecting data, run this query in your query tool:

```
SELECT * FROM PSPTUMPPMTAGR;
```

## 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:

This example illustrates a test coverage report in PIA format.

Impacted Objects and Objects with No Coverage				Find   View All         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	0.2010-07-16	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):

Column Name	Description
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.

<b>Column Name</b>	<b>Description</b>
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 <b>Include Usage Monitor Data</b> check box is selected and the value in the <b>Usage Monitor Data</b> column is <b>Yes</b>.</p>
Usage Monitor Data	<p>When the <b>Include Usage Monitor Data</b> check box is selected this value will be <i>Yes</i> or <i>No</i>. When the <b>Include Usage Monitor Data</b> check box is deselected the value will be set to <i>No Data</i>.</p>

## 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**

This example illustrates the fields and controls on the Create Test Details Report page.

Select from 1 to 10 Tests		
	Test Name	Description
<input type="checkbox"/> \PeopleTools Development\Analytic Tools\Charting (CHART)	PTD_CHART_ORG_BASIC	Basic tests for Org Chart
<input type="checkbox"/> \PeopleTools Development\Analytic Tools\Charting (CHART)	PTD_CHART_RB_BASIC	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.

This example illustrates a test details report.

<b>PeopleSoft Test Framework</b>					
<b>Test Details Report</b>					
<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
		Object Properties	Menu: MAINTAIN_SECURITY	Component: USER_SAVEAS.GBL	
			Page: (SEARCH)	PageField:	
			Record:	Field:	
<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**

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.

Test Name	Description
<input checked="" type="checkbox"/> TC_12_06_COPY_TEMPLATE_03	My Profile page

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:

<b>Field or Control</b>	<b>Description</b>
<b>Search for Tests By</b>	<p>Select <i>Name</i> to search for reports by test name, or <i>Desc</i> to search for reports by their description.</p> <p>Enter the search string in the adjacent edit box. To retrieve all reports, leave the edit box blank.</p>
<b>Search</b>	<p>Click to populate the <b>Select Test(s) to Create Compare Report</b> grid with the tests that match the criteria specified.</p>
<b>Select All</b>	<p>Click to select all tests that are listed in the <b>Select Test(s) to Create Compare Report</b> grid.</p>
<b>Clear All</b>	<p>Click to deselect all tests that are listed in the <b>Select Test(s) to Create Compare Report</b> grid.</p>
<b>Report Format</b>	<p>Select the report output format. Options are:</p> <ul style="list-style-type: none"> <li>• <b>PIA</b> - View the report in the application browser.</li> <li>• <b>Excel</b> - Create a Microsoft Excel file.</li> </ul>
<b>Generate Report</b>	<p>Click to create the report.</p>

This example illustrates a test compare report in PIA format.

Test Compare Report					
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	E\$56\$&25591_Row1	E\$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	E\$56\$&25591_Row2	E\$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

## 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**

This example illustrates the fields and controls on the Matrix Details Report page.

The screenshot shows the 'Test Matrix Report' page. At the top, there is a 'Search Criteria' section with fields for 'Folder' (set to 'PTQA\TESTSCRIPTS'), 'Search For Tests By' (set to 'Name' with value 'PTD\_SF\_D'), and 'Project' (set to 'PTFTLSPROJ'). Below this is a 'Search' button. The main area is titled 'Select Test(s) to Matrix Report'. It contains a grid of test entries with columns for 'Test Parent Folder', 'Test Name', and 'Description'. The grid lists various DELETE\_QUERY tests from the 'PTQA\TESTSCRIPTS\SES\_SearchFrameWork' folder. At the bottom of the grid are buttons for 'Select All', 'Clear All', and 'Generate Report'.

Test Parent Folder	Test Name	Description
\PTQA\TESTSCRIPTS\SES_SearchFrameWork	PTD_SF_DELETE_QUERY	
\PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_CAT	
\PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_DEF	
\PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_DEPLOY	
\PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_SRCH_INDEX	
\PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_SRCH_INDX_FULL	
\PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_TEST_PAGE1	
\PTQA\TESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_TEST_PAGE_SEC	
\PTQA\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>Field or Control</b>	<b>Description</b>
<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 <b>Select Test(s) to Matrix Report</b> grid with the tests that match the criteria specified.
<b>Select All</b>	Click to select all tests that are listed in the <b>Select Test(s) to Matrix Report</b> grid.
<b>Clear All</b>	Click to deselect all tests that are listed in the <b>Select Test(s) to Matrix Report</b> grid.
<b>Generate Report</b>	Click to create the report.

This example illustrates the generated Matrix Details report.

Personalize   Find   View All   <input type="button" value="New"/>   <input type="button" value="Print"/> First <input checked="" type="checkbox"/> 1-12 of 12 Last					
Test Parent Folder	Test Name	Test Type	Top Parent	Selected Test	Child Test
1 \PTQATESTSCRIPTS\SES_SearchFrameWork	PTD_SF_DELETE_QUERY	Shell Test	X		
2 \PTQATESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_SRCH_INDEX	Test	X	X	
3 \PTQATESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_SRCH_IDX_FULL	Test	X	X	
4 \PTQATESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_DEF	Test			X
5 \PTQAFLAJAX_Gen	PTD_SF_AJAX_SELECT_LOOKUP_ITEM	Library			X
6 \PTQAFLAJAX_Gen	PTD_SF_FRAMESET	Library			X
7 \PTQATESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_TST_PAGE	Test			X
8 \PTQAFLISES	PTD_SF_DEL_QRY_SEARCH	Library			X
9 \PTQATESTSCRIPTS\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 \PTQATESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_CAT	Test			X
12 \PTQATESTSCRIPTS\SES_SearchFrameWork\DELETE_QUERY	PTD_SF_DEL_QRY_DEPLOY	Test			X

## 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

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## Incorporating PTF Best Practices

This section discusses how to incorporate PTF best practices.

### Keep your Desktop Simple

Close all programs other than PTF and the PeopleSoft application browser during recording and runtime 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.

- Runtime order.

PTF Explorer sorts tests alphabetically within each folder. It is sometimes useful to view tests in order of intended runtime, 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 runtime 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 runtime 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 runtime.

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 processed.

### Related Links

[Make Tests Dynamic](#)

## Use Configuration and Runtime Options

Employ configuration options and runtime 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 runtime options for the user ID and password at the login page:

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 runtime 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		PTDOCL
3			<input type="checkbox"/>		Pwd	Set_Value	Name=passwd		1ENC29CDD0D8E830562C4010E2C487016EC90509EEC
4			<input type="checkbox"/>		Button	Click	Name=Submit		
5			<input checked="" type="checkbox"/>		Link	Click	id=ptnavicca_PORTAL_ROOT_OBJECT		
6			<input checked="" type="checkbox"/>		Link	Click	id=fdra_MANAGE_ASSETS1Index=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		
*									

## Related Links

- [Defining PTF Configuration Options](#)
- [Configuring Runtime 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 Recorder with Chrome and Microsoft Edge](#)
- [Defining PTF 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 > PTF 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 runtime 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 processed 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 runtime 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

[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.

This example illustrates the fields and controls for a simple PTF test.

Test: PTD_PORTAL_CN_WEBPROPPROPSAVE						
Test Information			Test Case Information			
Name:	PTD_PORTAL_CN_WEBPROPPROPSAVE	Description:	Name: [1]	DEFAULT	Description:	
Seq	ID	Comment	Active	Scroll ID	Type	Action
1	1		✓		Browser	Start_Login
2	2		✓		Browser	FrameSet
3	18		✓		Page	Prompt
4	46		✓		Browser	FrameSet
5	47		✓		Button	Click
6	49		✓		Browser	FrameSet
7	50		✓		Link	Click
8	51		✓		Browser	FrameSet
9	20		✓		CheckBox	Get_Property
10	21		✓		CheckBox	Get_Property
11	22		✓		CheckBox	Set_Value
12	23		✓		CheckBox	Set_Value
13	24		✓		Page	Save

Each step in a test is composed of the following fields:

Term	Definition
Seq (sequence)	A system-generated sequence number. Test steps run 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 deactivate 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, Check box, Browser, and so on.

<b>Term</b>	<b>Definition</b>
<b>Action</b>	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.
<b>Recognition</b>	The means that PTF uses to identify the object within the application. Commonly, this is the HTML ID property.
<b>Parameters</b>	<p>The conditions that apply to this specific step, if applicable.</p> <p><b>Note:</b> 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.</p>
Field Label	<p>Contains the label text of the page control referenced in the Recognition field.</p> <p>The value for the Show Field Label option in the Local Options dialog box determines whether this column appears:</p> <ul style="list-style-type: none"> <li>• If <b>Column</b> is selected, the Field Label column appears.</li> <li>• If <b>Tooltip</b> 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.</li> </ul> <p>For more information about setting local options, see <a href="#">Configuring Local Options</a>.</p>
<b>Value</b>	<p>In a typical recorded step, this is the value the tester entered for an object.</p> <p>In a step recorded in verify mode, this would be the value that was present in the object when it was verified.</p>

In general, 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:

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	P	R	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 the components of the PTF test language.

## 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*:

This example illustrates the drop-down list showing available actions for the step type:Text.

Text	▼	Set_Value	▼
Link	▼	Exists	
Link	▼	GetLabel	
Link	▼	Get_Property	
Link	▼	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. In the Recognition column or Parameters column you can either press the F4 key, or double-click and then click the More icon that appears, 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.

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

### 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.

This example illustrates how the reserved word #TODAY can be used in a test step.

Type	Action	Recognition	Parameters	Value
Text	Set_Value	Name=EFFDT_FROM		#TODAY

### Related Links

[Reserved Words](#)

## System Variables

System variables are predefined variables that PTF populates at runtime. System variables provide data about the current environment, runtime 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:

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 the run.

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:

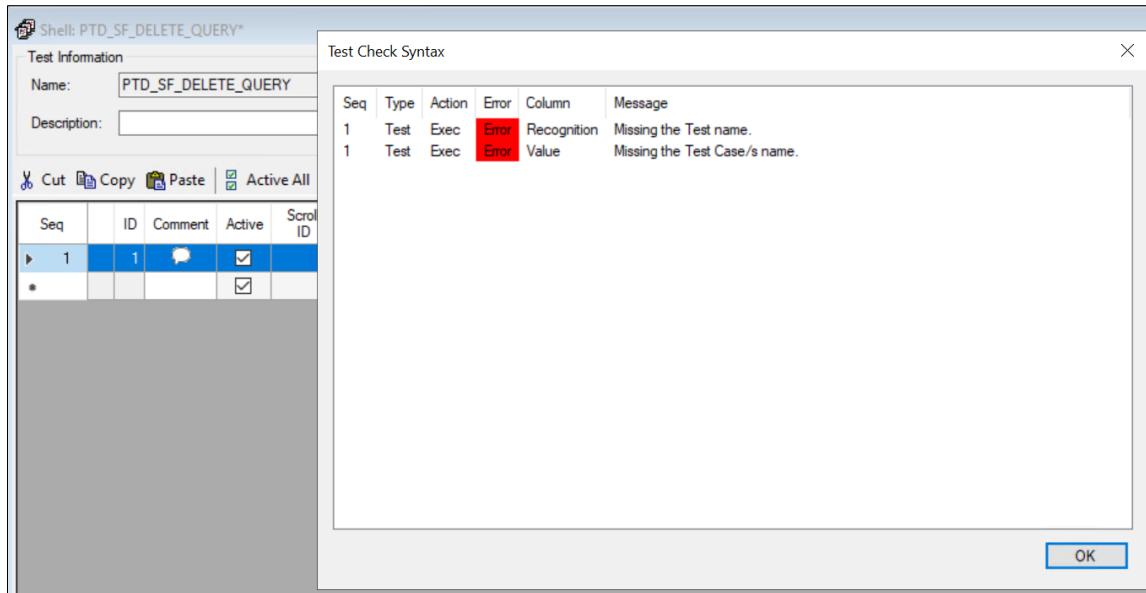
- PTF functions.
- System variables.
- Reserved words.
- Condition sign.
- File and folder names.
- Duplicated parameters.
- Missing values.

- Parameter that is not available for the action.
- Missing parameter name.

## Running On Demand Syntax Check

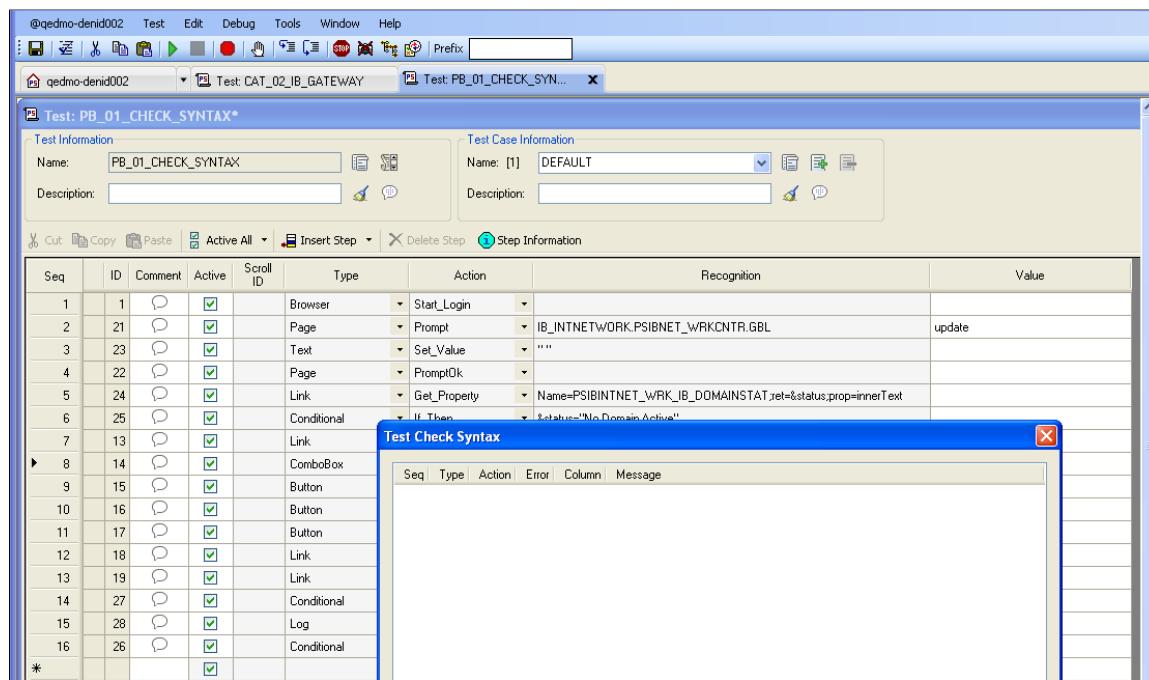
After you have edited your test, select Test, Check Syntax or click the Check Syntax icon. The errors and warnings will be displayed. When you click on the error or warning in the Test Check Syntax window, the step is highlighted in the test.

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:

This example illustrates the check syntax dialog box with no errors.



## Automatically Running Syntax Check on Save

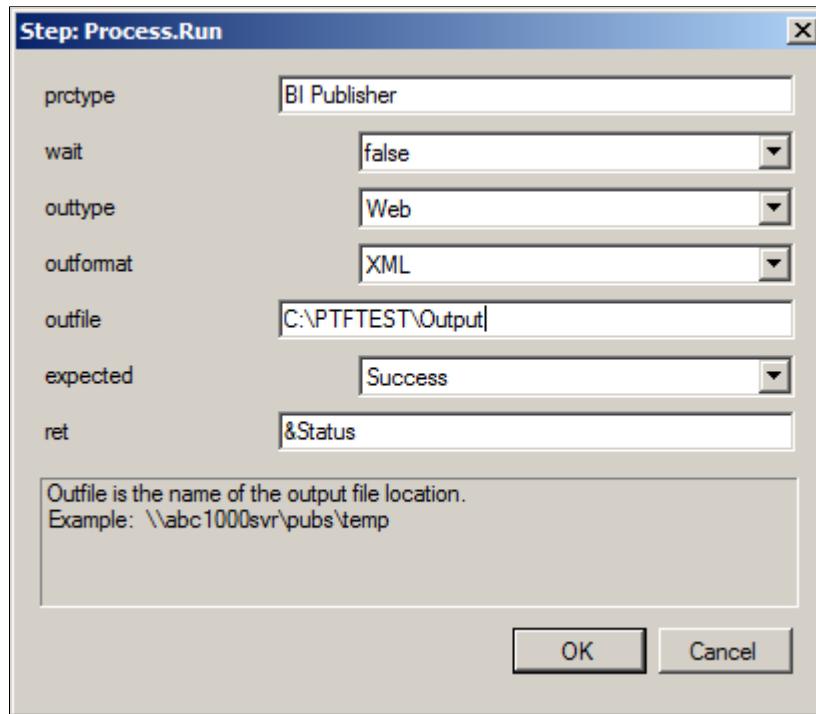
To have Syntax Check run automatically every time you save a test:

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 press the F4 key or double-click in the Parameters cell to display and enter the parameters. For each parameter, an explanation and example are displayed. This is an example of the step Process.Run:

This example illustrates the fields and controls on the Parameter dialog box for Step:Process.Run.



For some step types, for example Query, you can also double-click in the Value column to display and enter parameters.

# Test Language Reference

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## Step Types

This section lists each of the PTF step types and defines the actions associated with the step type. The step types are listed in alphabetical order.

---

## Browser

Use the Browser step type to manage browser instances during test run.

**Note:** Beginning with release 8.55, PTF supports running multiple browser instances from a single PTF client. This enables you to toggle between any or all open browsers. For example, you could use this functionality to verify that an action from one browser instance would change the data displayed in another browser instance.

To identify and manage each instance, you can assign a name, using a string or a variable, when it is launched. If you do not specify a name parameter, then PTF will assign “browser\_0” as a name for the first browser, then “browser\_1” for the second browser, and so on. If the 2nd browser is opened due to using a specific FormFactor, then PTF uses the name “FormFactor”, similarly if it is opened due to a query, the name assigned is “query”.

PTF also assigns each instance an index value automatically, and you can use the index to refer to a specific instance. The first browser instantiated is assigned an index value of 0. The next browser instantiated will have an index value of 1, and so on. If a given browser is closed, then the index value for any browsers that were instantiated after that browser will decrease by 1, in other words the index is dynamically updated by PTF.

---

These are the actions associated with the Browser step type.

### Close

#### Description

Closes the current browser window (that is, the one with the execution focus).

### CloseAll

#### Description

Closes all browser instances that were instantiated by the PTF client.

---

**Note:** Only browser instances that were instantiated by the *same* PTF client execution instance are closed.

---

## Count

### Description

Determines the number of currently open PTF client-initiated browser instances.

---

**Note:** Counts only browser instances that were instantiated by the *same* PTF client execution instance.

---

### Parameters

Parameter	Description
ret=&variable	Specify a variable to store the return value.

## Exists

### Description

Checks if a browser instance exists. Evaluates to true if it exists, false if it does not.

### Parameters

Parameter	Description
name=value	The name of the browser instance, such as browser1.
ret=&variable	Optional parameter. Specify a variable to store the return value.

## FrameExists

### Description

Checks if a frame exists on a browser page. Specify the frame name in the value column.

## Parameters

<b>Parameter</b>	<b>Description</b>
expected= <i>value</i>	<p>Optional parameter. If used, PTF writes either a Pass or Fail for the step in the test log, based on whether the matching frame exists. If this parameter is not included, then only step information is logged during execution.</p> <p>For example:</p> <pre>expected=true Logs an error when the frame is <i>not</i> found; logs Passed if found, logs Failed if not found.  expected=false Logs an error when the frame <i>is</i> found; logs Passed if not found, logs Failed if found.</pre>
ret=& <i>variable</i>	Optional parameter. Specify a variable to store the return value.

## 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.

## Get\_Active

### Description

Gets the currently active browser instance's name or index. Use in combination with Set\_Active when working with multiple browser instances, to control which one is active.

## Parameters

<b>Parameter</b>	<b>Description</b>
name=< <i>value</i> >	
index=< <i>value</i> >	
ret=& <i>variable</i>	Optional parameter. Specify a variable to store the return value.

## Example

The following example shows a PTF test step that uses the Browser.Get\_Active type/action.

Type	Action	Recognition	Parameters	Value
Browser	Get_Active		ret=&hook1	

## Set\_Active

### Description

Sets the active browser instance, when working with multiple browser instances. Use in combination with Get\_Active to control which browser instance is active when working with multiple browsers instances.

## Example

The following example shows a PTF test step that uses the Browser.Set\_Active type/action.

Type	Action	Recognition	Parameters	Value
Browser	Set_Active	&hook1		

## 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

The following example shows a PTF test step that uses the Browser.Set\_URL type/action.

Type	Action	Recognition	Parameters	Value
Browser	Set_URL	EMPLOYEE		

## Start

### Description

Starts the browser instance where the test will be run. Uses the URL from the currently active runtime 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 currently active runtime option, and the language selected in the test Language field.

### **Parameters**

<b>Parameter</b>	<b>Description</b>
<code>name=value</code>	<p>Optional parameter.</p> <p>Assigns a name to the browser instance. This enables you to manage multiple browser instances by referring to them by their assigned name. You can use a string or a variable to specify the name.</p>

## **WaitForNew**

### **Description**

Waits for a new browser instance to open, then continues test run in that browser instance.

Specify a timeout value in seconds in the Value column. The default is 10 seconds.

### **Parameters**

<b>Parameter</b>	<b>Description</b>
<code>name=value</code>	<p>Optional parameter.</p> <p>Assigns a name to the new browser instance. This enables you to manage multiple browser instances by referring to them by their assigned name. You can use a string or a variable to specify the name.</p>
<code>max=value</code>	<p>True – maximizes the window for the new browser instance.</p> <p>False – keeps the existing window size for the new browser instance.</p> <p>The default is true.</p>

### **Example**

The following example shows a PTF test step that uses the Browser.WaitForNew type/action. This step launches a new test application browser instance with the window maximized, assigns the name

“browser1” to the browser instance, and waits 30 seconds before proceeding to the next test step. Test run then continues in the new browser instance.

Type	Action	Recognition	Parameters	Value
Browser	WaitForNew		name=“browser1”; max=true	30

## Button

This step type performs an action on a 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](#).

### Get\_Style

#### Description

The description for this action is in the Common Actions section.

See [Get\\_Style](#)

## 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. The following actions are desupported but PeopleSoft still provides support for them:

- ChartGetType
- GetText
- SectionCount

## ChartClick

### Description

Performs a mouse click on a clickable area of the chart. PTF recognizes the following HTML ID properties:

<i>HTML ID Property</i>	<i>Usage</i>
tag	Returns an HTML SVG tag for the target clickable area. The tags are: <ul style="list-style-type: none"> <li>• Circle</li> <li>• Path</li> <li>• Polygon</li> <li>• Rectangle</li> </ul>
fill	Returns RGB values of an HTML object.  It is recorded if the tag attribute has no unique identifier.
index	Returns the specific HTML object based on the HTML source. It returns a number value.  It is recorded when multiple elements are present with same attributes.

## Example

Type	Action	Recognition	Parameters	Value
Chart	ChartClick	tag=polygon fill=rgb(83,110,209) index=2		

## Get\_Property

### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

Different business charts like Charts, Status Meter Gauges, LEG Gauge, Rating Gauge, and Spark Charts support different properties, for example Charts support the following properties:

- GroupCount
- SeriesCount
- Type
- XAxisTitle
- YAxisTitle

---

**Note:** Get\_Property on a Charts business chart does not support object oriented properties of a chart such as series and so on.

---

See [Get\\_Property](#).

## Example

The example is for Get\_Property action for JET Chart type.

Type	Action	Recognition	Parameters	Value
Chart	Get_Property	chart=2DBar	idx=0;prop=XAxisTitle; ret=&xtitle	

## Related Links

[Get\\_Property](#)

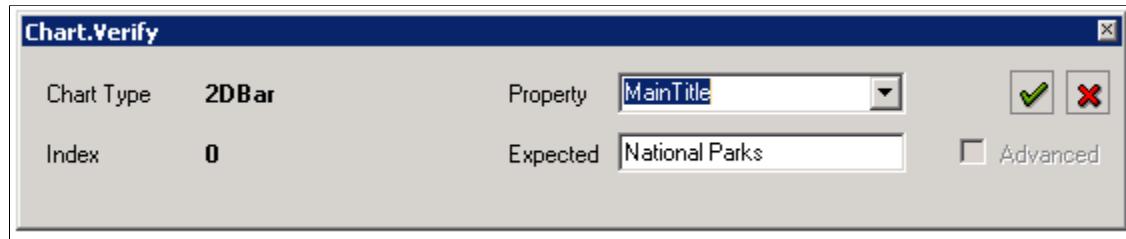
## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

When you drag the Verify icon and drop it on a chart on the browser page, the chart is highlighted and the Chart.Verify dialog box opens.

Chart.Verify dialog box appears where you enter the required properties of the chart.



<b>Parameter</b>	<b>Description</b>
Chart Type	Populated from the HTML tag.
Index	Populated from the HTML tag. It is the index value of a chart object when there are more than one chart on the same page.
Property	Select from the available properties for a particular <b>Chart Type</b> .
Expected	Displays the value to be verified which depends on the <b>Property</b> field. It is populated when a property is selected.  The field in some instances may remain blank if there is no value to be verified.

### Example

The table illustrates the Verify action for Chart step type.

Type	Action	Recognition	Parameters	Value
Chart	Verify	chart=2DBar	idx=0;prop=ReferenceArea(1).Description	Reference Area2
Chart	Verify	chart=2DBar	idx=0;prop=DateSeries(1)	GLACIER

## Related Links

[Verify](#)

## ChartGetType

### Description

Returns the chart type from a displayed chart.

### Parameters

<i>Parameter</i>	<i>Description</i>
chart= <i>value</i> ;	The index for the chart image on the page.
ret=& <i>variable</i> ;	The return value.

## GetText

### Description

Returns the text value for the specified chart section.

### Parameters

<i>Parameter</i>	<i>Description</i>
chart= <i>value</i> ;	The index for the chart image on the page.
idx= <i>value</i> ; url= <i>value</i> ; alt= <i>value</i> ;	The section recognition string. It can be the section index, the section URL, or the alternative text.
ret=& <i>variable</i> ;	The return value.

### Example

This is an example of the GetText action for a Chart step type:

Type	Action	Recognition	Parameters	Value
Chart	GetText	chart=0	idx=3;ret=&chart_val	

Type	Action	Recognition	Parameters	Value
Log	Message	The value for index 3 is &chart_val		
Chart	GetText	chart=0	idx=2;ret=&chart	
Log	Message	The value for index 2 is &chart_val		

## SectionCount

### Description

Counts the number of regions in a chart.

### Parameters

Parameter	Description
chart= <i>value</i>	The index for the chart image on the page.
ret=& <i>variable</i>	The variable to store 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 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	urltype=default	update
Text	Set_Value	Name=QE_CHART RECORD_QE CHART_CATEGORY		CAR SALES

Type	Action	Recognition	Parameters	Value
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=&var;ret=&chart_value	
Log	Message	ChartValue => &chart_value		
Loop	Next			

## CheckBox

These are the actions associated with the CheckBox step type.

### Exists

#### Description

Checks whether the object exists on the page.

See [Exists](#).

### Get\_Property

#### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## Get\_Style

### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

## GetLabel

### Description

Gets the label of the specified HTML object.

See [GetLabel](#).

## Set\_Value

### Description

Gets the label of the specified HTML object.

See [Set\\_Value](#).

## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

---

## ComboBox

These are the actions associated with the ComboBox step type.

## Exists

### Description

Checks whether the object exists on the page.

See [Exists](#).

## **Get\_Property**

### **Description**

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## **Get\_Style**

### **Description**

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

## **GetLabel**

### **Description**

Gets the label of the specified HTML object.

See [GetLabel](#).

## **Set\_Value**

### **Description**

Sets the field value in the ComboBox to the value specified in the Value column.

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.

Type	Action	Recognition	Parameters	Value
ComboBox	Set_Value	name=PSOPRDEFN_LANGUAGE_CD		#LIST#English [French] Finnish

## Related Links

[#LIST#](#)

## ValueExists

### Description

Checks whether a specified value exists in a combo box. Enter the value to be verified in the Value field. The full text entry or the metadata translation (XLAT) value can be specified for the value; PTF will consider either as a match.

### Parameters

Parameter	Description
expected= <i>value</i>	Specify expected=true or expected=false. Logs a Pass or Fail based on whether the ret parameter matches the expected parameter.
ret=& <i>variable</i> ;	ret=true – the value exists ret=false – the value does not exist

### Example

This example checks if the PA\_CALCULATION\_TYPE combo box contains *Automatic*, and logs a Fail if it does not exist.

Type	Action	Recognition	Parameters	Value
ComboBox	ValueExists	name=PA_CALCULATION_TYPE	expected=true;ret=&CalcType	Automatic

## 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:

Type	Action	Recognition	Parameters	Value
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

Runs a command line program.

#### Parameters

Parameter	Description
name= <i>commandname</i>	The command name as defined on the Define Configuration Options page. See <a href="#">Defining PTF Configuration Options</a> .
timeout= <i>seconds</i>	The number of seconds before the program times out.
ret=& <i>variable</i>	The variable to store the return value.

#### Example

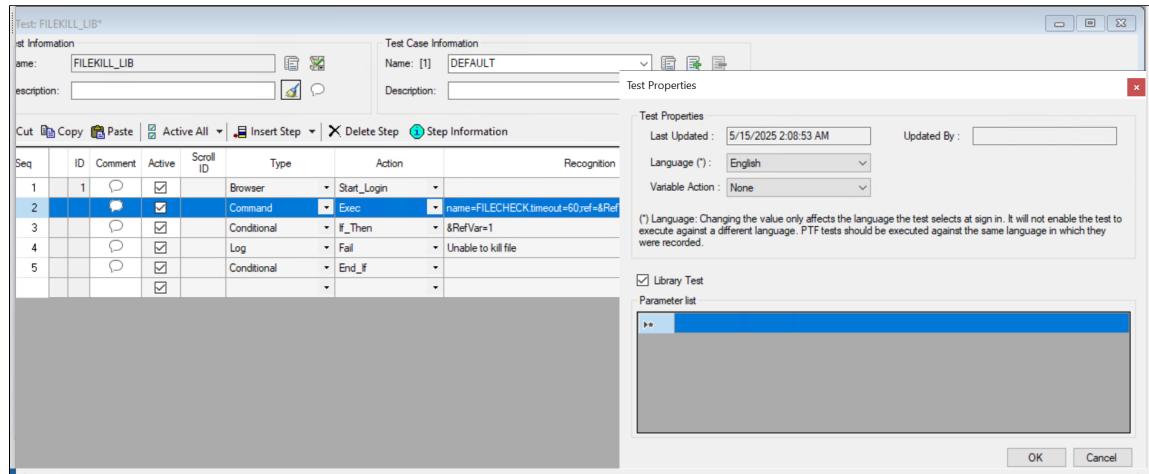
This is an example of a command line program that requires multiple parameters.

Type	Action	Recognition	Parameters	Value
Command	Exec	name=TEXT_COMP	timeout=60; ret=&return	WORDVPC:\temp\base.txt C:\temp\actual.txt C:\temp\comparison.doc

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.

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, which 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	Parameters	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=XRFWIN	prctype=BI Publisher;outtype=File; outformat=PDF;outfile=&filename	

Type	Action	Recognition	Parameters	Value
Text	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 runs 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 runs 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` step, and continues the run.

`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:

Type	Action	Recognition	Parameters	Value
Variable	Set_Value	&Integer		3
Conditional	If_Then	&Integer>=1 AND &Integer<=10 OR &Integer=0		
Log	Message	Determine if 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			

---

## Dashboard

Use the Dashboard step type to perform actions on OpenSearch Dashboards with PTF.

## ChartCountRange

### Description

Counts the number of slices on pie and donut charts, bars on horizontal and vertical bar charts, and points on area and line charts.

### Parameters

<b>Parameter</b>	<b>Description</b>
chartlabel	The chart title.
charttype	The chart type.  Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
ret	The return value.
axis	axis=X – the number of bars on the X-axis.  axis=Y – the number of bars on the Y-axis.  Not applicable for pie and donut charts.

### Example

Type	Action	Recognition	Parameters	Value
Dashboard	ChartCountRange		chartlabel=Remote Worker Distribution Percentage;charttype=hbar;ret=&count;axis=X	Remote Worker Distribution Percentage

## ChartGetMaxValue

### Description

Returns the maximum value from the given axis (X or Y axis) of the area, bar, or line chart.

### Parameters

<b>Parameter</b>	<b>Description</b>
chartlabel	The chart title.

<b>Parameter</b>	<b>Description</b>
charttype;	The chart type. Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
ret	The return value.
axis	axis=X – the maximum value from the X-axis. axis=Y – the maximum value from the Y-axis. Not applicable for pie and donut charts.

## Example

Type	Action	Recognition	Parameters	Value
Dashboard	ChartGetMaxValue		chartlabel=Remote Worker Distribution Percentage;charttype=hbar;ret=&count;axis=X	Remote Worker Distribution Percentage

## ChartGetMinValue

### Description

Returns the minimum value from the given axis (X or Y axis) of the area, bar, or line chart.

### Parameters

<b>Parameter</b>	<b>Description</b>
chartlabel	The chart title.
charttype	The chart type. Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
ret	The return value.
axis	axis=X – the minimum value from the X-axis. axis=Y – the minimum value from the Y-axis. Not applicable for pie and donut charts.

## Example

Type	Action	Recognition	Parameters	Value
Dashboard	ChartGetMinValue		chartlabel=Remote Worker Distribution Percentage;charttype=hbar;ret=&count;axis=Y	Remote Worker Distribution Percentage

## ChartLabelVerify

### Description

Verifies labels on a chart based on the given parameters. The chart can be identified using the chart caption (chart title).

### Parameters

Parameter	Description
charttype	The chart type. Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
chartlabel	The chart title.
xlabel	The X-axis label. Not applicable for pie and donut charts.
ylabel	The Y-axis label. Not applicable for pie and donut charts.
slicelabel	The slice label on the pie or donut chart. Applicable only for pie and donut charts.

## Example

Type	Action	Recognition	Parameters	Value
Dashboard	ChartLabelVerify		charttype=pie;chartLabel=Remote Worker Distribution Percentage;slicelabel=Onsite	Remote Worker Distribution Percentage

## ChartTooltipVerify

### Description

Verifies the tooltip content of the slice on pie and donut charts, the bar on horizontal and vertical bars, and the point on area and line charts.

### Parameters

<b>Parameter</b>	<b>Description</b>
charttype	The chart type. Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
categoryaxis	categoryaxis=X – the tooltip content of the X-axis. categoryaxis=Y – the tooltip content of the Y-axis. Not applicable for pie and donut charts.
axisvalue	The axis value. Not applicable for pie and donut charts.
field	The field name. Applicable only for bar charts.
value	The value for the field.

### Example

Type	Action	Recognition	Parameters	Value
Dashboard	ChartTooltipVerify		charttype=hbar;categoryaxis=Y;axisvalue=Finance and Administration;field=Onsite;value=Department=Finance and Administration Count=26 Remote Worker Type=Onsite	Employee Distribution by Department

## ChartValueVerify

### Description

Verifies values on a chart based on the given parameters. The chart can be identified using the chart caption (chart title).

## Parameters

<b>Parameter</b>	<b>Description</b>
charttype	The chart type. Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
xvalues	The X-axis values. Not applicable for pie and donut charts.
yvalues	The Y-axis values. Not applicable for pie and donut charts.
slicevalue	The slice value. Applicable only for pie and donut charts.

## Example

Type	Action	Recognition	Parameters	Value
Dashboard	ChartValueVerify		charttype=line;xvalues=2014;yvalues=5;Chart Label=Applications - External vs Internal	Applications - External vs Internal

## ClearAllFilter

### Description

Clears all the applied filters.

### Example

Type	Action	Recognition	Parameters	Value
Dashboard	ClearAllFilter			

## ClickDateRange

### Description

Clicks on commonly used links to set the date range.

## Example

Type	Action	Recognition	Parameters	Value
Dashboard	ClickDateRange			Last 30 days

## DashboardChartClick

### Description

Clicks on a chart based on the given parameters. The chart can be identified using the chart caption (chart title). The click operation can be performed on chart components like slice, bar, or point to apply filters.

### Parameters

Parameter	Description
charttype	The chart type. Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
categoryaxis	categoryaxis=X – to click on the X-axis. categoryaxis=Y – to click on the Y-axis. Not applicable for pie and donut charts.
axisvalue	The axis value. Not applicable for pie and donut charts.
field	The field name.

## Example

Type	Action	Recognition	Parameters	Value
Dashboard	DashboardChartClick		charttype=line;categoryaxis=X;axisvalue=Year=2017 Application Count=1 Applicant Type=Employee;field=Employee	Applications - External vs Internal

## DataDownload

### Description

Downloads CSV or Raw data from the inspect pop-up of the given chart. The chart can be identified by the chart caption (chart title).

### Parameters

<b>Parameter</b>	<b>Description</b>
type	The data type.

### Example

Type	Action	Recognition	Parameters	Value
Dashboard	DataDownload		type=Formatted CSV name=Applicants	Current Remote Worker Details

## DatatableAction

### Description

Based on the key field name and key field value, verifies or selects the row.

### Parameters

<b>Parameter</b>	<b>Description</b>
keyfieldname	The key field name.
keyfieldvalue	The key field value.
action	action=verify – to verify the column for the selected row. action=select – to select the actionable link for the selected row.
grouplabel	The label for the group.
actionfieldname	The field name to perform the action.

<b>Parameter</b>	<b>Description</b>
actionfieldvalue	The field value to perform the action.
keyfieldname	The key field name.

## Example

This example shows the use of the DatatableAction action:

<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
Dashboard	DatatableAction		keyfieldname=Employee ID;keyfieldvalue=KUD002;action=Verify; actionfieldname=Remote Location;actionfieldvalue=Home	Current Remote Worker Details

## DataTableHeaderVerify

### Description

Verifies the single column header from the given data table.

### Parameters

<b>Parameter</b>	<b>Description</b>
headerlabel	The label for the header.
grouplabel	The label for the group.

## Example

This example shows the use of the DataTableHeaderVerify action:

<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
Dashboard	DataTableHeaderVerify		headerlabel=Department	Current Remote Worker Details

## DataTablePageGoTo

### Description

Opens the given page number on the data table visualization. This action can be performed for visible page numbers only.

### Parameters

<b>Parameter</b>	<b>Description</b>
pagenumber	The page number.
grouplabel	The label for the group.

### Example

This example shows the use of the DataTablePageGoTo action:

Type	Action	Recognition	Parameters	Value
Dashboard	DataTablePageGoTo		pagenumber=3	Current Remote Worker Details

## DataTableRowCount

### Description

Counts the number of visible rows on the current page of the data table.

### Parameters

<b>Parameter</b>	<b>Description</b>
ret	The return value.
grouplabel	The label for the group.

### Example

This example shows the use of the DataTableRowCount action:

Type	Action	Recognition	Parameters	Value
Dashboard	DataTableRowCount		ret=&var1	Current Remote Worker Details

## FilterValueExist

### Description

Verifies the given value in the filter drop-down list based on the field parameter. FilterValueExist is a playback action only and cannot be recorded.

### Parameters

Parameter	Description
field	The field name.
value	The value for the field.

### Example

This example shows the use of the FilterValueExist action:

Type	Action	Recognition	Parameters	Value
Dashboard	FilterValueExist		field=Applicant ID;value=300271	

## RefreshFilter

### Description

Clicks the **Refresh** button present on the filter bar.

### Example

This example shows the use of the RefreshFilter action:

Type	Action	Recognition	Parameters	Value
Dashboard	RefreshFilter			

## RemoveFilter

### Description

Removes the filter from the filter bar based on the given parameters.

### Parameters

<b>Parameter</b>	<b>Description</b>
field	The field name.
operator	The field operator.
value	The value for the field.

### Example

This example shows the use of the RemoveFilter action:

<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
Dashboard	RemoveFilter		field=Applicant ID;operator=is not;value=300271	

## Search

### Description

Searches any keyword or text using the search box available on the dashboard.

### Example

This example shows the use of the Search action:

<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
Dashboard	Search			Employee Distribution by Department

## SetDateRange

### Description

Sets the date range from the date range pop-up.

### Parameters

<i>Parameter</i>	<i>Description</i>
rangetype	rangetype=LAST – to set the range type to the previous date range. rangetype=NEXT – to set the range type to the next date range.
value	The date range value.
period	Set the period in Seconds, Minutes, Hours, Days, Weeks, Months, or Years.

### Example

This example shows the use of the SetDateRange action:

Type	Action	Recognition	Parameters	Value
Dashboard	SetDateRange		rangetype=Last;period=years;value=150	

## SetFilter

### Description

Sets the filter using filter pop-up form.

### Parameters

<i>Parameter</i>	<i>Description</i>
field	The field name.
operator	The field operator.
value	The value for the field.

## Example

This example shows the use of the SetFilter action:

Type	Action	Recognition	Parameters	Value
Dashboard	SetFilter		field=Applicant ID;operator=is not between;value=300 to 315	

## TileChartLabelVerify

### Description

Verifies labels on a chart (inside the PIA tile) based on the given parameters. The chart can be identified using the chart caption (chart title).

### Parameters

Parameter	Description
charttype	The chart type. Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
chartlabel	The chart title.
xlabel	The X-axis label. Not applicable for pie and donut charts.
ylabel	The Y-axis label. Not applicable for pie and donut charts.
slicelabel	The slice label on the pie or donut chart. Applicable only for pie and donut charts.

## Example

This example shows the use of the TileChartLabelVerify action:

Type	Action	Recognition	Parameters	Value
Dashboard	TileChartLabelVerify		charttype=line;xlabel=Year	Application Details

## TileChartValueVerify

### Description

Verifies labels on a chart (inside the PIA tile) based on the given parameters. The chart can be identified using the chart caption (chart title).

### Parameters

Parameter	Description
charttype	The chart type. Includes hbar, vbar, area, line, pie, and donut charts. See <a href="#">Supported Chart Types</a> .
xvalues	The X-axis values. Not applicable for pie and donut charts.
yvalues	The Y-axis values. Not applicable for pie and donut charts.
slicevalue	The slice value on the pie or donut chart. Applicable only for pie and donut charts.

### Example

This example shows the use of the TileChartValueVerify action:

Type	Action	Recognition	Parameters	Value
Dashboard	TileChartValueVerify		charttype=line;xvalues=2018;yvalues=10	Application Details

## TileClick

### Description

Clicks the dashboard tile on the PIA homepage.

### Example

This example shows the use of the TileClick action:

Type	Action	Recognition	Parameters	Value
Dashboard	TileClick	id=win0groupetPTNUI _LAND_REC_ GROUPLET\$153		Application Details

## TileVerify

### Description

Verifies the dashboard tile on the PIA homepage.

### Example

This example shows the use of the TileVerify action:

Type	Action	Recognition	Parameters	Value
Dashboard	TileVerify	id=win0groupetPTNUI _LAND_REC_ GROUPLET\$153		Application Details

## VerifyFilter

### Description

Verifies the filter on the filter bar based on given parameters.

### Parameters

Parameter	Description
field	The field name.

<b>Parameter</b>	<b>Description</b>
operator	The field operator.
value	The value for the field.

## Example

This example shows the use of the VerifyFilter action:

<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
Dashboard	VerifyFilter		field=Applicant ID;operator=is between;value=1021 to 1050	Application Details

## Supported Chart Types

The following chart types are supported in the Dashboard step type:

<b>Chart Type</b>	<b>PTF Keyword (for charttype parameter)</b>
Area	area
Donut	pie
Pie	pie
Line	line
Horizontal Bar	hbar
Vertical Bar	vbar

---

## DataLoader

Use the DataLoader step type to map a query to a test. You can run the test using query results. You do not have to create test cases each time you want to use new data for an existing test.

**Load** is an action associated with **DataLoader** step type.

## Related Links

[Mapping PSQuery to a Test](#)

[Configuring Runtime Options in PTF Client](#)

## Load

### Description

Loads the query and its parameters to the test. The **Edit DataLoader** dialog box accessed from the **Recognition** field displays options to map the query. See [Editing the DataLoader Step Type](#).

### Parameters

Parameter	Description
source	Specifies the name of the PSQuery in current DataLoader.
sourceType	Specifies the source of the data, for example 'NMQ' means the data source is PSQuery.
params=<SOURCE_PARAM1>:<PARAM_VALUE1> [<SOURCE_PARAM2>:<PARAM_VALUE2>]	Specifies the parameter names and their values of the PSQuery.
ownType	Specifies the type of owner, whether the query is public or private.
rowcount=&variable	Returns the row count of query result set.

### Example

This example shows the DataLoader step type with *MESSAGES\_FOR\_MSGSET* query and the parameters.

Type	Action	Recognition	Parameters	Value
DataLoader	Load	name=Source1	source=MESSAGES_FOR_MSGSET;ownType=public;params=MESSAGE_SET_NBR:&message;	

---

## DataMover

This is the action associated with the DataMover step type.

## Exec

### Description

Runs a PeopleSoft Data Mover script. Specify the script name in the Value column. PTF uses the locations specified in the Data Mover section of the Execution Options - PeopleTools tab as the paths for the DMS files. If the DMS Output Path is not defined, it uses the system temp folder.

### Example

This example shows the use of the Exec action:

Type	Action	Recognition	Parameters	Value
DataMover	Exec			C:\Temp\emp_imp.dms

## DateTime

These are the actions associated with the DateTime step type.

### Exists

#### Description

Checks whether the object exists on the page.

See [Exists](#).

### Get\_Property

#### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

### Get\_Style

#### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#)

## GetLabel

### Description

Gets the label of the specified HTML object.

See [GetLabel](#).

## Set\_Value

### Description

Gets the label of the specified HTML object.

See [Set\\_Value](#).

## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

---

## Div

Use the Div step type to interact with Div objects. These are the actions associated with the Div step type:

### Click

#### Description

Performs a mouse click on the specified object.

See [Click](#).

### Drag\_From

Performs the action of dragging a PTF object. It is followed by the **Drop\_Over** action where a previously selected object is dragged and released over a newly selected object on the same page.

See [Drag\\_From](#).

## Drop\_Over

Performs the action of dragging and releasing a PTF object over a newly selected object on the same page. It is preceded by the **Drag\_From** action where a previously selected object is dragged from a position.

See [Drop\\_Over](#).

## Exists

### Description

Checks whether the object exists on the page.

See [Exists](#).

## Get\_Property

### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

Use the browser's in-built element inspector to identify the properties and values of an object.

See [Recording Tests](#)

See [Get\\_Property](#).

## Get\_Style

### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

You can use the browser's in-built element inspector identify the properties and values of an object.

See [Recording Tests](#)

See [Get\\_Style](#).

## MouseOut

### Description

Gets the hexadecimal value of the background color of an object when the mouse cursor moves away from it.

If during playback the same background color value is not found, then the step will fail. You can find the details in the log.

The action is only recorded on grids which has class ps\_grid-row psc\_rowact and type Div

## Example

The following example shows test steps where a mouse out is recorded with background color as transparent. On playback if the background color value is not transparent when the mouse rolls out from the object, the step will fail.

Type	Action	Recognition	Parameters	Value
Div	MouseOut	Id=Book\$0_row_0	Prop=background-color bover_value=transparent	

## MouseOver

### Description

Gets the hexadecimal value of the background color of an object when the mouse cursor rolls over it.

If during playback the same background color value is not found, then the step will fail. You can find the details in the log.

The action is only recorded on grids which has class ps\_grid-row psc\_rowact and type Div

## Example

The following example shows test steps where a mouse over is recorded with background color as #ded. On playback if the background color value is not #ded when the mouse is on the object, the step will fail.

Type	Action	Recognition	Parameters	Value
Div	MouseOver	Id=Book\$0_row_0	Prop=background-color bover_value=#ded	

## ScrollIt

### Description

Activates the scroll in a Div object to refresh the data with the next set of records. The Recognition field should contain the Div id property.

Typically this step.action is inserted during recording (recommended), by using the recorder toolbar; however, you can also use the browser's inbuilt element inspector to determine the Div id property when adding Div.ScrollIt steps as you edit a test. A Div.ScrollIt step should be added for each browser refresh that is required to access the desired record; multiple Div.ScrollIt steps may be needed.

## Runtime

Use the Runtime actions in shell tests to modify the behavior of tests during runtime. You typically set these options as you are developing tests to facilitate the development process.

The Runtime step type is available only in shell tests.

### **Set\_Options**

#### **Description**

Override the default runtime option. Specify the name of a valid runtime option in the Recognition column.

### **Skip\_Login**

#### **Description**

Specify *True* or *False* in the Recognition column. Specify True to skip Browser.Start\_Login steps. Specify False to run Browser.Start\_Login steps.

### **Skip\_PageSave**

#### **Description**

Specify *True* or *False* in the Recognition column. Specify True to skip Page.Save steps. Specify False to run the 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 Runtime Options.

### **Skip\_RunRequest**

#### **Description**

Specify *True* or *False* in the Recognition column. Specify True to skip Process.Run steps. Specify False to run the Process.Run steps.

This action overrides the Skip RunRequest setting in Runtime Options.

### **StopOnError**

#### **Description**

Specify *True*, *False* or *ALL* in the Recognition column.

Specify True to stop runtime on the current called Test when a Fail is logged.

Specify False to continue runtime when the called test encounters a Fail.

Specify ALL to stop shelltest runtime when any called test encounters a Fail.

This action overrides the Stop on Error setting (located in the Debug menu of the Test Editor).

However, Stop On Error (-SOE ) parameter in command line runtime overrides the StopOnError runtime action in shell tests script.

For details on -SOE parameter, see [Using the Test Editor](#)

## Related Links

[Configuring Runtime Options in PTF Client](#)

---

# File

The File step type corresponds to the object in the PeopleSoft Internet Architecture that enables users to upload and download files to/from 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

The following examples show the use of File.Download.

This example illustrates the 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

This example illustrates the Download action from a button.

Type	Action	Recognition	Parameters	Value
Button	Click	Name=FILE_ATTACH _WRK_ATTACHDET		
File	Download			C:\TEMP\TEXT1.TXT

## Upload

### Description

Uploads a file from an HTML file object.

In the Recognition column specify the name of the HTML file object. In the Value column specify a full file path name.

### Example

This example shows the use of the Upload action:

Type	Action	Recognition	Parameters	Value
File	Upload	name=#OrigFileName		C:\TEMP\MyFile.TXT

## Upload\_ByLink

### Description

Uploads a file from an HTML link object.

In the Recognition column specify the name of the HTML link object. In the Value column specify a full file path name.

## Header

These are the actions associated with the Header step type:

### Exists

#### Description

Checks whether the object exists on the page.

See [Exists](#).

### Get\_Property

#### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

### Get\_Style

#### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

### Verify

#### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

---

## 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

<b>Parameter</b>	<b>Description</b>
index= <i>I/R/C</i> :	<p>The table, row, column index string.</p> <p>For example:</p> <pre>index=&amp;CellIndex index=1/2/3 ;</pre> <p>In the second example, CellClick clicks on the third column of the second row of the first table.</p>

## CellClickOnChkB

### Description

Clicks the check box specified in the table cell location based on the index parameter.

### Parameters

<b>Parameter</b>	<b>Description</b>
index= <i>I/R/C</i> :	<p>The table, row, column index string.</p> <p>For example:</p> <pre>index=&amp;CellIndex index=1/2/3;</pre> <p>In the second example, this function clicks on a check box within the third column of the second row of the first table.</p>
chkidx= <i>value</i> ;	The CheckBox object index inside the cell.
check= <i>value</i> ;	<p>check=Y – Select the check box.</p> <p>check=N – Deselect the check box.</p> <p>This parameter is optional. The default value is Y.</p>

## CellClickOnImage

### Description

Clicks the image specified in the table cell location based on the index parameter.

### Parameters

Parameter	Description
index= <i>I/R/C</i>	<p>The table, row, column index string.</p> <p>For example:</p> <pre>index=&amp;CellIndex index=1/2/3;</pre> <p>In the second example, this function clicks on an image within the third column of the second row of the first table.</p>
alt= <i>value</i>	Optional parameter. The alt property value of the HTML image to click.
title= <i>value</i>	Optional parameter. The title property value of the HTML image to click.

## CellClickOnLink

### Description

Clicks the link specified in the table cell location based on the index parameter.

### Parameters

Parameter	Description
index= <i>I/R/C</i> :	<p>The table, row, column index string.</p> <p>For example:</p> <pre>index=&amp;CellIndex index=1/2/3;</pre> <p>In the second example, this function clicks on a link within the third column of the second row of the first table.</p>
link= <i>value</i> ;	The link text value.

## CellExists

### Description

Determines whether a cell exists.

### Parameters

<b>Parameter</b>	<b>Description</b>
index= <i>I/R/C</i> :	<p>The table, row, column index string.</p> <p>For example:</p> <pre>index=&amp;CellIndex index=1/2/3;</pre> <p>In the second example, this function verifies whether a cell exists within the third column of the second row of the first table.</p>
ret=& <i>variable</i>	<p>The return value.</p> <p>True – the cell exists.</p> <p>False – the cell does not exist.</p>

## 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

<b>Parameter</b>	<b>Description</b>
text= <i>value</i> ;	The text to look for on the page.
index= <i>value</i> ;	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.

<b>Parameter</b>	<b>Description</b>
<code>equal=value;</code>	<p><code>equal=true</code> performs an exact match on the text to search for. This is the default for this optional parameter.</p> <p><code>equal=false</code> uses a LIKE statement when performing the search.</p>
<code>expected=value</code>	<p>Optional. If used, PTF writes either a Pass or Fail for the step in the test log based on whether a matching object exists. If this parameter is not included, then only step information is logged during execution.</p> <p>For example:</p> <p><code>expected=true</code> Logs an error when the expected value is <i>not</i> found; logs Passed if found, logs Failed if not found.</p> <p><code>expected=false</code> Logs an error when the expected value <i>is</i> found; logs Passed if not found, logs Failed if found.</p>
<code>ret=&amp;variable</code>	<p>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.</p> <p>For example:</p> <pre>ret=&amp;CellIndex</pre>

## Example

This example illustrates using the CellGetIndex to return a variable for the index, then creating a variable for the html cell that is to the left of the original cell using the sum function, and then clicking that cell. 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;equa l=true;ret=&htmlindex	
Variable	Set_Value	&htmlindex		sum(&htmlindex -1  3 "/")

Type	Action	Recognition	Parameters	Value
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

Parameter	Description
index= <i>I/R/C</i> :	The table, row, column index string.  For example:  <code>index=&amp;CellIndex</code> <code>index=1/2/3;</code>  In the second example, this function returns the contents of the third column of the second row of the first table.
ret=& <i>variable</i>	The return value.

## ColCount

### Description

Returns the number of columns for the HTMLTable row.

### Parameters

Parameter	Description
table= <i>value</i> ;	The table index.

<b>Parameter</b>	<b>Description</b>
<code>row=value;</code>	The row index.
<code>index=I/R/C:</code>	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:  <code>index=&amp;CellIndex;</code>
<code>ret=&amp;variable</code>	The return value.

## RowCount

### Description

Returns the number of rows for the HTMLTable.

### Parameters

<b>Parameter</b>	<b>Description</b>
<code>table=value;</code>	The table index.
<code>index=I/R/C:</code>	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:  <code>index=&amp;CellIndex;</code>
<code>ret=&amp;variable</code>	The return value.

---

## Image

These are the actions associated with the Image step type.

## Click

### Description

Performs a mouse click on the specified object.

See [Click](#).

## Exists

### Description

Checks whether the object exists on the page.

See [Exists](#).

## Get\_Property

### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## Get\_Style

### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

## RightClick

### Description

Performs a right-click on the image. This action is supported only for a related-content image glyph.

---

## Label

These are the actions associated with the Label step type:

## Exists

### Description

Checks whether the object exists on the page.

See [Exists](#).

## Get\_Property

### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## Get\_Style

### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

---

## Link

These are the actions associated with the Link step type.

## Click

### Description

Performs a mouse click on the specified object.

See [Click](#).

## **Drag\_From**

Performs the action of dragging a PTF object. It is followed by the **Drop\_Over** action where a previously selected object is dragged and released over a newly selected object on the same page.

See [Drag\\_From](#).

## **Drop\_Over**

Performs the action of dragging and releasing a PTF object over a newly selected object on the same page. It is preceded by the **Drag\_From** action where a previously selected object is dragged from a position.

See [Drop\\_Over](#).

## **Exists**

### **Description**

Checks whether the object exists on the page.

See [Exists](#).

## **Get\_Property**

### **Description**

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## **Get\_Style**

### **Description**

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

## **SaveTargetAs**

### **Description**

Performs a right-click, save as action on a link. Enter the link name in the Recognition column and the fully-qualified file name in the Value column.

## Example

This example shows test steps that save a report to a target location. From the View Log/Trace page (PMN\_CDM\_INDEX) in the Process Monitor, it clicks on the report name link, verifies it is the correct report, and then saves the report to a file.

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

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

## List

These are the actions associated with List step type.

## Get\_Property

### Description

Gets the property value of an HTML object and assign to the prop=value parameter. Also stores it to the variable in ret=&variable.

### Related Links

[Get\\_Property](#)

## Log

Use the Log step type to add entries to the PTF 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.

These are the actions associated with the Log step type.

## 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 illustrates Log actions:

Type	Action	Recognition	Parameters	Value
Browser	Start_Login			

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 Detail 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:

This example shows the test execution log that is generated when the test above is executed.

The screenshot shows a detailed log viewer interface. At the top, it says "Log: \$\\Users\\PTFTRN\\LOG\_ACTIONS\\2\_PTFTRN 2016-09-23 16:47". The main area displays a hierarchical log structure with various actions like "Browser Start", "Login", and "Log" actions. The "Log" actions contain text entries such as "Place this text in the variable", "Fail, Pass, and Warning are used in conditional constructs", "Text in the Recognition field is written to a line in the tree", and "Double-Click to view the image". A "Details" section at the bottom shows a "Result" entry for a "Warning" message: "This text is in the Recognition field". The "Time" is listed as "16:47:20".

## LongText

These are the actions associated with the LongText step type.

## Exists

### Description

Checks whether the object exists on the page.

See [Exists](#).

## Get\_Property

### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## Get\_Style

### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#)

## GetLabel

### Description

Gets the label of the specified HTML object.

See [GetLabel](#).

## SetValue\_Value

### Description

Gets the label of the specified HTML object.

See [SetValue\\_Value](#).

## SetValue\_InModal

### Description

Use the `SetValue_InModal` action to set the value of a long text field on a modal page.

## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

## Loop

These are the actions associated with the Loop step type.

### Do

### Description

Executes the steps between a Loop.Do step and a Loop.End\_Loop step, until a Loop.Exit\_Loop step is encountered.

### Example

This example illustrates a Loop.Do construct.

Type	Action	Recognition	Parameters	Value
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.Do, Loop.For, or Loop.While construct. Execution continues with the step after the End\_Loop step. Typically, a Loop.Exit\_Loop step is placed within a conditional construct.

## **For**

### **Syntax**

&variable=*begin\_value* to *end\_value*;

### **Description**

Executes the steps between a Loop.For step and a Loop.Next step until the expression in the Recognition field evaluates to False, at which point the execution skips to the step immediately after the Loop.Next step.

### **Parameters**

<b>Parameter</b>	<b>Description</b>
&variable	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.

### **Example**

This example illustrates using the Loop.For with Loop.Next to terminate the loop.

Type	Action	Recognition	Parameters	Value
Variable	Set_Value	&Var =0		
Loop	For	&Var =1 to 5		
Log	Message	The variable is &Var		
Loop	Next			

## While

### Description

Executes the steps between a Loop.While step and a Loop.End\_Loop while the expression in the Recognition field evaluates to True.

When the expression evaluates to false, execution skips to the step after the Loop.End\_Loop step.

### Example

This example illustrates a Loop.While construct.

Type	Action	Recognition	Parameters	Value
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			

---

## 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.

Action	Description
<b>AbortIgnoreRetry</b>	Creates a message box that contains 3 buttons- Abort, Ignore, and Retry.
<b>OKCancel</b>	Creates a message box that contains 2 buttons- OK and Cancel.
<b>OKOnly</b>	Creates a message box that contains 1 button- OK.
<b>RetryCancel</b>	Creates a message box that contains 2 buttons- Retry and Cancel.
<b>YesNo</b>	Creates a message box that contains 2 buttons- Yes and No.
<b>YesNoCancel</b>	Creates a message box that contains 3 buttons- Yes, No, and Cancel.

## Parameters

Parameter	Description
<code>prompt=value;</code>	<p>The text string displayed in the message dialog box.</p> <p>To include a line break within a text string, use <code>&lt;NL&gt;</code>. For example:</p> <pre>prompt=Newline Message Prompt!! &lt;NL&gt;Line1&lt;NL&gt;Line2&lt;NL&gt;Line3</pre> <p>Creates the following text string:</p> <pre>Newline Message Prompt! ! Line1 Line2 Line3</pre>
<code>title=value;</code>	The text string displayed in the title bar of the message dialog box.
<code>ret=&amp;variable;</code>	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
Cancel	2
Abort	3
Retry	4
Ignore	5
Yes	6
No	7

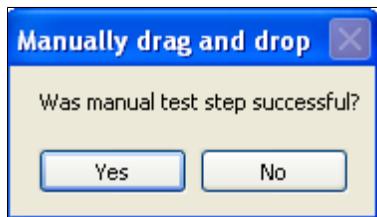
## Example

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.

<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
Variable	Set_Value	&TestStep		Manually drag and drop
Variable	Set_Value	&Prompt		Was manual test 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		

Type	Action	Recognition	Parameters	Value
Conditional	End_If			

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

Checks whether the object exists on the page.

See [Exists](#).

### Get\_Property

#### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

### Get\_Style

#### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

## GetLabel

### Description

Gets the label of the specified HTML object.

See [GetLabel](#).

## Set\_Value

### Description

Gets the label of the specified HTML object.

See [Set\\_Value](#).

## Verify

### Description

Checks whether the object exists on the page.

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.

Type	Action	Recognition	Parameters	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		Calculator Calendar Dictionary

Type	Action	Recognition	Parameters	Value
Page	Save	Name=PORTAL_ HPWRK_HTMLAREA \$17\$		

---

## Number

These are the actions associated with the Number step type:

### Exists

#### Description

Checks whether the object exists on the page.

See [Exists](#).

### Get\_Property

#### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

### Get\_Style

#### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

### GetLabel

Gets the label of the specified HTML object.

See [GetLabel](#).

### SetValue

Gets the label of the specified HTML object.

See [Set\\_Value](#).

## Verify

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

## 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 tab name in the Recognition field.

#### Example

This example illustrates the Go\_To action for a page.

Type	Action	Recognition	Parameters	Value
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

## Parameters

<b>Parameter</b>	<b>Description</b>
urltype= <i>value</i>	<p>Specify the URL format (if it contains ‘psp’ or ‘psc’). Valid values are:</p> <ul style="list-style-type: none"> <li>• content</li> <li>• default</li> <li>• portal</li> </ul>
waitForTime= <i>value</i>	<p>Specify the time in seconds. The test execution will proceed after the specified time. Using the parameter you can provide time for the page to load before the next steps in the test are executed.</p> <p><b>Note:</b> Use the waitForTime parameter with urltype=portal.</p>

## PromptOK

### Description

Closes the search page. If the action specified in the Value field is *update*, then this action selects the first returned value.

### Example

This example illustrates the use of the Prompt and PromptOK actions.

Type	Action	Recognition	Parameters	Value
Page	Prompt	SQA_MENU.SQA_SIMPLECOMP.GBL	urltype=portal	add update
Text	Set_Value	name=SQA_SIMPLEREC_SQA_DATAID		US001

Type	Action	Recognition	Parameters	Value
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

This example illustrates a non-standard page save, where the non-standard save object is defined in the recognition field.

Type	Action	Recognition	Parameters	Value
Page	Save	Name=PORTAL_ HPWRK_HTMLAREA		

## SecPage\_Close

### Description

Closes the secondary page. No parameters are used.

## SecPage\_Open

### Description

Opens a secondary page.

### Parameters

Parameter	Description
page= <i>value</i>	Specify the name of the secondary page.

### Example

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

Parameter	Description
prcname= <i>value</i> ;	The process name.
prctype= <i>value</i> :	The process type.
wait= <i>value</i> ;	True - the test waits for the process to finish. False - the test does not wait for the process to finish. The default is False.
distribution_expected= <i>value</i>	The status of the file to be posted. Values are: <ul style="list-style-type: none"><li>• N/A</li><li>• None</li><li>• Generated</li><li>• Posting</li><li>• Not Posted</li><li>• Posted</li></ul> If the distribution final status equals the distribution expected status, then a Pass is logged; if not, a Fail is logged.

<b>Parameter</b>	<b>Description</b>
distribution_ret=&variable	True or False value which captures the distribution status of the file in Process Monitor.
click_refresh=value	<p><i>On</i> or <i>Off</i> value determines if PTF refreshes process monitor status in fixed intervals or the status gets auto-refreshed.</p> <p>The default value is <i>On</i>.</p> <p>On - PTF refreshes the Process Monitor page every six seconds to verify the process and distribution status.</p> <p>Off - PTF does not refresh the Process Monitor page. Instead, the Process Monitor page auto-refreshes to display the updated process status.</p> <p>No value- takes the default value.</p> <p><b>Note:</b> If the PIA does not support auto-refresh of process monitor, then the value must be set to <i>Off</i>.  See “Viewing the Status of Processes” (Process Scheduler)  See “Monitoring Jobs and JobSets” (Process Scheduler)</p>
outtype=value;	The process output type.
outformat=value;	The process output format.
outfile=value;	The process output file.
expected=value;	<p>Defines the expected status for the process when it completes.</p> <p>Expected status is based on status values returned in the Run Status column in Process Monitor.</p> <p>For example:</p> <pre>expected=Success; expected=No Success;</pre> <p>If the final status equals the expected status, then a Pass is logged; if not, a Fail is logged.</p>
ret=&variable	<p>The return value.</p> <p>True - the process completed successfully.</p> <p>False - the process did not complete successfully.</p>

## Example

This example shows use 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	APPMSGMONITOR. 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 =APPMSGARCH	prctype= Application Engine;outtype =Web;outformat =TXT;expected =Success;ret=&Status distribution_ expected=Posted; distribution_ret= &ProcessDistributionOK; click_refresh=on	
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

<b>Parameter</b>	<b>Description</b>
RunButton= <i>value</i> ;	The run button name.
ProcessMonitorLink= <i>value</i> ;	The Process Monitor link name.
ProcessInstanceField= <i>value</i> ;	The field where the process instance ID will appear.
QueuedTimeout= <i>value</i> ;	Overwrites the local option value (in minutes).
PostingTimeout= <i>value</i> ;	Overwrites the local option value (in minutes).
ProcessingTimeout= <i>value</i> ;	Overwrites the local option value (in minutes).
ExceptionTimeout= <i>value</i> ;	General timeout, in minutes, for all the states that are not in the local option.
QueuedResult= <i>value</i> ;	Overwrites the local option value. Valid values are <i>FAIL</i> and <i>WARN</i> .
PostingResult= <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

Checks whether the object exists on the page.

See [Exists](#).

## GetLabel

### Description

Gets the label of the specified HTML object.

See [GetLabel](#).

## Set\_Value

### Description

Gets the label of the specified HTML object.

See [Set\\_Value](#).

---

## Query

These are the actions are 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

Parameter	Description
outFile= <i>value</i> ;	The query output file.
outFolder= <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 Options dialog box.
outFormat= <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 Options dialog box.

<b>Parameter</b>	<b>Description</b>
param= <i>value</i> ;	The list of comma delimited values for all the query parameters.
0rows= <i>value</i> ;	If the query returns zero rows, add a log entry of type value. Valid values are Pass, Fail, or Warning.
Nrows= <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>Parameter</b>	<b>Description</b>
outFile= <i>value</i> ;	The query output file.
outFolder= <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 Options dialog box.
outFormat= <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 Options dialog box.
param= <i>value</i> ;	The list of comma delimited values for all the query parameters.
0rows= <i>value</i> ;	If the query returns zero rows, add a log entry of type value. Valid values are Pass, Fail, or Warning.
Nrows= <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.

---

**Note:** Query steps do not support simultaneous usage of both 0rows= and Nrows= parameters in the same step.

---

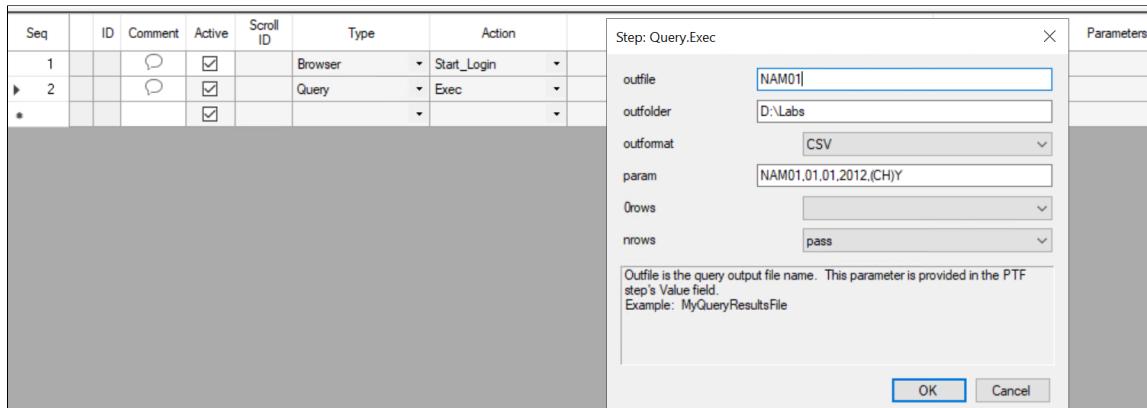
Use the following formats to specify query parameters:

<b>Page Control</b>	<b>Format</b>
Text	param= <i>value</i>
Radio button	param={RB} <i>value</i>
Combo box	param={CB} <i>value</i>
Check box	param={CH} <i>value</i>
Text box	param={EB} <i>value</i>

## 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.

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 **Parameters** 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.

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

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## Get\_Style

### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

## GetLabel

### Description

Gets the label of the specified HTML object.

See [GetLabel](#).

## SetValue

### Description

Gets the label of the specified HTML object.

See [SetValue](#).

## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

---

## Range

These are the actions associated with the Range step type.

### Exists

#### Description

Checks whether the object exists on the page.

See [Exists](#).

### Get\_Property

#### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

### Get\_Style

#### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

### GetLabel

Gets the label of the specified HTML object.

See [GetLabel](#).

## **Set\_Value**

Gets the label of the specified HTML object.

See [Set\\_Value](#).

## **Verify**

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

---

## **RichText**

These are the actions associated with the RichText step type.

### **GetLabel**

#### **Description**

Gets the label of the specified HTML object.

See [GetLabel](#).

### **Set\_Value**

#### **Description**

Gets the label of the specified HTML object.

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. Specify the action in the Value column.

This table lists the valid values for the Action action.

Action Value	Description
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 <b>Find</b> 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.

### Parameters

Parameter	Description
ret=&variable;	The return value. It returns the position index for the field acted upon, based on the row identified using Key_Set.

<b>Parameter</b>	<b>Description</b>
expected= <i>value</i> ;	<p>Optional. Applies only to the find action. If used, PTF writes either a Pass or Fail for the step in the test log based on whether a matching object exists. If this parameter is not included, then only step information is logged during execution.</p> <p>For example:</p> <p><code>expected=true</code> Logs an error when the expected value is <i>not</i> found; logs Passed if found, logs Failed if not found.</p> <p><code>expected=false</code> Logs an error when the expected value <i>is</i> found; logs Passed if not found, logs Failed if found.</p>

## 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

<b>Parameter</b>	<b>Description</b>
def= <i>value</i> ;	<p>The default name object type. Example:</p> <pre>def=PARENT;</pre> <p>Valid def values are:</p> <ul style="list-style-type: none"> <li>• ADD: Overrides the <b>Add new row</b> button.</li> <li>• DEL: Overrides the <b>Delete row</b> button.</li> <li>• NEXT: Overrides the <b>Next</b> button.</li> <li>• PREV: Overrides the <b>Previous</b> button.</li> <li>• FIRST: Overrides the <b>First</b> button.</li> <li>• LAST: Overrides the <b>Last</b> button.</li> <li>• PARENT: Reassigns the parent for a specific scroll area.</li> </ul>

<b>Parameter</b>	<b>Description</b>
type= <i>value</i> ;	<p>The object type for the new action.</p> <p>Example 1:</p> <pre>type=Image;</pre> <p>Example 2:</p> <pre>type=PushButton;</pre>
value= <i>value</i> ;	<p>The scroll parent variable or the new object recognition string.</p> <p>Example 1:</p> <pre>value=&amp;Scr1;</pre> <p>Example 2:</p> <pre>value=Name=\$ICField3\$newm\$0\$\$img\$0;</pre>
start= <i>value</i> ;	<p>Used to set the scroll area index when the index is not \$0 .</p> <p>In this example the index will start the scroll index at \$1.</p> <pre>def=START;Value=1</pre>
skipvalidation= <i>value</i> ;	<p>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.</p> <p>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.</p> <p>Example 1:</p> <p>This example will skip the validation when a single row is inserted or deleted from the scroll area.</p> <pre>def=SKIPVALIDATION;type=SINGLE_ROW</pre> <p>Example 2:</p> <p>This example will skip the validation if multiple rows have been inserted or deleted from the scroll area.</p> <pre>def=SKIPVALIDATION;type=MULTIPLE_ROW</pre>

## Examples

This example uses the Definition action with the def=ADD parameter to assign the Add action to the image \$ICField3\$newm\$0\$\$mg\$0:

Type	Action	Recognition	Parameters	Value
Scroll	Definition	value=Name=\$ICField3\$newm\$0\$mg\$0	def=ADD;type=Image	

In this example the Definition action with a def=PARENT parameter reassigns the parent:

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	Scroll 1 index variable = &Scroll1	365
2	Scroll	Definition	value=&Scr1	def=PARENT;type=Button	
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

<b>Parameter</b>	<b>Description</b>
type=value;	The step type for the key field. Example: <code>type=Text;</code>
name=value;	The name of the key field.

## Example

This example illustrates using Key\_Set and Action:

<b>Scroll ID</b>	<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
1	Scroll	Key_Set	Name=PSC_SCR_REC01_PSE_KEY_LVL1	type=Text	ROW1
1	Scroll	Action		ret=&Scr1	upd
	Text	Verify	Name=PSC_SCR_REC01_PSE_KEY_LVL&Scr1		ROW1
	ComboBox	Set_Value	Name=PSC_SCR_REC01_PSE_KEY_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.

## PageNumberField

### Description

Returns the grid page number, for example `Scroll.PageNumberField = 11-20 of 23`

Use the action on a **Scroll** step type for Classic and Classic Plus pages. The pages display the sets of rows using a drop down list. The grid shows the rows included in the row set.

### Parameters

<b>Parameter</b>	<b>Description</b>
<code>ret=&amp;variable;</code>	Returns the grid page number of the row identified using Key_Set action.

### Example

This example illustrates using PageNumberField with Key\_Set.

<b>Scroll ID</b>	<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
1	Scroll	Key_Set	<code>id=PSROLEUSER_VW_ROLENAME</code>	<code>type=Text</code>	Search Server
1	Scroll	Action		<code>ret=&amp;scrl</code>	sel
1	Scroll	PageNumberField		<code>ret=&amp;nub</code>	

## 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

This example illustrates using the RowCount action to perform a loop:

<b>Scroll ID</b>	<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
	Browser	Start_Login			
	Browser	FrameSet	TargetContent		
	Page	Prompt	MAINTAIN_SECURITY. USERMAINT.GBL		update
	Text	Set_Value	Name=PSOPRDEFN_SRCH_OPRID		STU1
	Page	PromptOk			
	Page	Go_To	Roles		
1	Scroll	Key_Set	name=PSROLEUSER_VW_ROLENAME	type=Text	Dummy
1	Scroll	RowCount		ret=&Count	
	Variable	Set_Value	&EndCount		Add(&Count -1)
	Loop	For	&RowCount =0 to &EndCount		
	Text	Get_Property	name=PSROLEUSER_VW_ROLENAME \$&RowCount	prop=Value; ret=&Value	
	Log	Message	The role of row number &RowCount is &Value		
	Loop	Next			

---

## Span

These are the actions associated with the Span step type.

## Click

### Description

Performs a mouse click on the specified object.

See [Click](#).

## Drag\_From

Performs the action of dragging a PTF object. It is followed by the **Drop\_Over** action where a previously selected object is dragged and released over a newly selected object on the same page.

---

**Note:** The action is only supported for PTF playback.

---

See [Drag\\_From](#).

## Drop\_Over

Performs the action of dragging and releasing a PTF object over a newly selected object on the same page. It is preceded by the **Drag\_From** action where a previously selected object is dragged from a position.

---

**Note:** The action is only supported for PTF playback.

---

See [Drop\\_Over](#).

## Exists

### Description

Checks whether the object exists on the page.

See [Exists](#).

## Get\_Property

### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## **Get\_Style**

### **Description**

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#)

## **GetLabel**

### **Description**

Gets the label of the specified HTML object.

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” (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:

Type	Action	Recognition	Parameters	Value
Browser	Start			

Type	Action	Recognition	Parameters	Value
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:

Type	Action	Recognition	Parameters	Value
Browser	WaitForNew			
Span	MouseOver	id=QE_EMPLOYEE_EMPLID		
Link	Click	Name=QE_EMPL_PHOTO2_URL		
Span	MouseOverClose	id=QE_EMPLOYEE_EMPLID		

## Related Links

“Using Pop-up Pages” (Application Designer Developer’s Guide)

## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

### Example

This step validates a Span object that contains informational text:

Type	Action	Recognition	Parameters	Value
Span	Verify	ClassName=PSTEXT		Select an option

## Test

This is the action associated with the Test step type.

### Exec

#### Description

Calls another test or library test.

Specify the child test or library 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 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:

Type	Action	Recognition	Parameters	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

Checks whether the object exists on the page.

See [Exists](#).

## Get\_Property

### Description

Gets the property value of an HTML object and assign to the `prop=value` parameter. Also stores it to the variable in `ret=&variable`.

See [Get\\_Property](#).

## Get\_Style

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

See [Get\\_Style](#).

## GetLabel

### Description

Gets the label of the specified HTML object.

See [GetLabel](#).

## SetValue

### Description

Gets the label of the specified HTML object.

See [SetValue](#).

## Verify

### Description

Compares the value in the browser to the expected value, and adds a pass or fail log entry for the validation.

See [Verify](#).

---

## UsageMonitor

Use the UsageMonitor step type to control managed object tracking during test run. This step type must be used as a pair of start/stop actions. Also, the **Environment is Usage Monitor Enabled** option, which is located on the Advanced Runtime Options dialog (or page), must be selected for usage monitoring to be active.

See [Configuring Runtime Options in PTF Client](#) or [Configuring Runtime Options in PeopleSoft Internet Architecture](#)

These are the actions associated with the UsageMonitor step type.

### Start

#### Description

Initiates usage monitoring.

### Stop

Stops usage monitoring.

---

## Variable

This is the action associated with the Variable step type.

### Set\_Value

#### Description

Assigns a value to the given variable.

#### Example

This example includes test steps that use the Variable step type to set a value for a variable:

Type	Action	Recognition	Parameters	Value
Log	Message	This is a test of variables.		
Variable	Set_Value	&Var1		This is Var1.

Type	Action	Recognition	Parameters	Value
Log	Message	The value of Var1 = &Var1		
Variable	Set_Value	&Var2		This is Var2
Log	Message	The value of Var2 = &Var2		
Variable	Set_Value	&Var3		&Var1
Log	Message	Var3 is a clone of Var1. The value is &Var3		

## Related Links

[Variables](#)

---

## Wait

Use the Wait step type to pause test execution.

These are the actions associated with the Wait step type.

## For\_Seconds

### Description

Wait the number of seconds specified in the Recognition field before proceeding to the next step.

## For\_Value

### Description

Wait until the field contains the value specified in the Value field.

### Parameters

Parameter	Description
type= <i>value</i>	Specify the object type, such as Text, Combobox, Link, and so on.

<b>Parameter</b>	<b>Description</b>
timeout= <i>value</i>	[Optional] Specify the time out value, in seconds. The default is 300 seconds.
refresh= <i>value</i>	<p>[Optional] Specify the identifier of the target refresh button, link, or image. If the refresh= parameter is specified, PTF waits five seconds between each validation process and the click on the <b>Refresh</b> button.</p> <p>The Refresh parameter can be defined in the below formats:</p> <ul style="list-style-type: none"> <li>• <i>refresh=&lt;buttonName&gt;</i>- the identifier will be converted to <i>Name=&lt;buttonName&gt;</i></li> <li>• <i>refresh=Name=&lt;buttonName&gt;</i>-the identifier will be converted to <i>Name=&lt;buttonName&gt;</i></li> <li>• <i>refresh=Id=&lt;buttonId&gt;</i>- the identifier will be converted to <i>Id=&lt;buttonId&gt;</i></li> <li>• <i>refresh=InnerText=&lt;buttonInnerText&gt;</i>- the identifier will be converted to <i>InnerText=&lt;buttonInnerText&gt;</i></li> </ul>

## Example

This example shows PTF test steps that use the **Wait** step type:

<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
Wait	For_Seconds	60		
Wait	For_Value	id=PB_GO_ALL\$0	type=Link; timeout=120; refresh =Name=#ICRefresh	P

---

## Reserved Words

This section describes PTF reserved words, listed in alphabetical order.

### #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:

Type	Action	Recognition	Parameters	Value
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:

Type	Action	Recognition	Parameters	Value
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:

Type	Action	Recognition	Parameters	Value
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

[#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:

Type	Action	Recognition	Parameters	Value
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 like #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 KUSPTEST:

Type	Action	Recognition	Parameters	Value
Text	Set_Value	ID=PA_CLC_SUMMARY_CALC_NAME		#FAIL#KUSPTEST

### 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.

Type	Action	Recognition	Parameters	Value
Test	Exec	CHILD_ONE		CASE_01
Test	Exec	CHILD_TWO		#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:

Type of Match	Pattern	Match (Log a Pass)	No Match (Log a Fail or Warn)
Multiple characters	a*a	aa, aBa, aBBBa	ABC
Multiple characters	*ab*	abc, AABB, 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:

Type	Action	Recognition	Parameters	Value
Text	Set_Value	Name=PA_BENEFIT_PLAN		#LIKEF#US*
Text	Set_Value	Name=PA_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:

Type	Action	Recognition	Parameters	Value
Text	Set_Value	Name=PA_PROP_VOUCH_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.

Type	Action	Recognition	Parameters	Value
ComboBox	Set_Value	Name=PA_CALC_CALC_TYPE		#LIST# Individual  Pre-Defined Group Pre-Defined List
ComboBox	Set_Value	Name=PA_CALC_CALC_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:

Type	Action	Recognition	Parameters	Value
ComboBox	Set_Value	Name=PA_CALC_CALC_TYPE		#LIST#I G L
ComboBox	Set_Value	Name=PA_CALC_CALC_TYPE		#LIST#[I] G L

## #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:

Type	Action	Recognition	Parameters	Value
ComboBox	Set_Value	Name=PA_CALC_REASON		#NOTHING
ComboBox	Verify	Name=PA_CALC_REASON		#NOTHING

## #PREFIX#

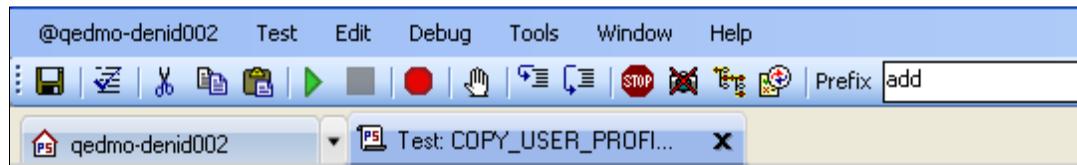
### Description

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:

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:

Type	Action	Recognition	Parameters	Value
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:

Type	Action	Recognition	Parameters	Value
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:

Type	Action	Recognition	Parameters	Value
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#](#)

---

## 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.

The following step types support this action:

- Button.
- Image.
- Link.
- Number.
- Range.
- Span.

### Example

This example shows the use of the Click action with a Button object and a Link object:

Type	Action	Recognition	Parameters	Value
Button	Click	Name=PB_FILTER		
Link	Click	Name=LAST_NAME \$0		

## Drag\_From

### Description

Performs the action of dragging a PTF object. It is followed by the **Drop\_Over** action where a previously selected object is dragged and released over a newly selected object on the same page.

PTF throws an error when a drag action is not immediately followed with a drop action or a drop action is not preceded with a drag action. You can select the **Check Syntax** option to display any errors or warnings. See Syntax Check.

The following step types support **Drag\_From** and **Drop\_Over** actions:

- Div.

Keep in mind:

- The **Drag\_From** and **Drop\_Over** actions are supported for PTF recorder and playback.

- The actions are associated with Div step type when the HTML code includes *div* tag with attributes *draggable= "true"* and *droppable= "true"*.
- Link.

Keep in mind:

- The **Drag\_From** and **Drop\_Over** actions are supported for PTF recorder and playback.
- When PTF records tests for Tree Manager, instances of step definitions with Link step type and these actions can be found.

- Span.

Keep in mind:

- The **Drag\_From** and **Drop\_Over** is only supported for PTF playback.
- The actions are associated with Span step type when the HTML code includes the *Span* tag nested in the *div* tag with attributes *draggable= "true"* and *droppable= "true"*.

See Drop\_Over.

## Example

Type	Action	Recognition	Parameters	Value
Div	Drag_From	id=win0divPTNUI_LAND_REC_GROUPLET\$1		
Div	Drop_Over	id=win0divPTNUI_LAND_REC_GROUPLET\$6		

Type	Action	Recognition	Parameters	Value
Span	Drag_From	id=PTNUI_LAND_REC_GROUPLET_LBL\$0		
Span	Drop_Over	id=PTNUI_LAND_REC_GROUPLET_LBL\$1		

Type	Action	Recognition	Parameters	Value
Link	Drag_From	id=PTPG_SIMPL_WRK_PTPG_CHARTSERIES		

Type	Action	Recognition	Parameters	Value
Link	Drop_Over	id=PTPG_SIMPL_WRK_PTPG_CHARTXAXIS		

## Drop\_Over

Performs the action of dragging and releasing a PTF object over a newly selected object on the same page. It is preceded by the **Drag\_From** action where a previously selected object is dragged from a position.

For details and examples, see [Drag\\_From](#).

## Exists

### Description

Checks whether the object exists on the page.

The following step types support this action:

- [Button](#).
- [CheckBox](#).
- [ComboBox](#).
- [Header](#).
- [Image](#).
- [Label](#).
- [Link](#).
- [LongText](#).
- [MultiSelect](#).
- [Pwd](#).
- [Radio](#).
- [Span](#).
- [Text](#).

## Parameters

Parameter	Description
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:

This example illustrates the Exists action.



## Get\_Property

### Description

Gets the property value of an HTML object and assign to the prop=value parameter. Also stores it to the variable in ret=&variable.

Use the browser's in-built element inspector to identify the properties and values of an object.

See [Recording Tests](#)

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.

The following step types support this action:

- [Button](#).
- [Chart](#).
- [CheckBox](#).
- [ComboBox](#).

- Div.
- Header.
- Image.
- Label.
- Link.
- List
- LongText.
- MultiSelect.
- Radio.
- Span.
- Text.

## Parameters

<b>Parameter</b>	<b>Description</b>
prop= <i>value</i> ;	The property name.
ret=& <i>variable</i> ;	The return value.

## Example

<b>Type</b>	<b>Action</b>	<b>Recognition</b>	<b>Parameters</b>	<b>Value</b>
Text	Get_Property	Name=UserID	ret=&TxtProp; prop=Status	
Log	Message	This is the status: &TxtProp		
Button	Get_Property	Name=Submit	ret=&BtnProp; prop=tagName	
Log	Message	This is the tagname for the button: &BtnProp		
Button	Get_Property	Name=Submit	ret=&BtnProp; prop=Value	

Type	Action	Recognition	Parameters	Value
Log	Message	This is the Value for the button:&BtnProp		

## Get\_Style

### Description

Gets the style value of properties in a class from the HTML stylesheet. The value is assigned to `prop=value` parameter and stores it to the variable in `ret=&variable`.

You can use the browser's in-built element inspector identify the properties and values of an object.

See [Recording Tests](#)

The following step types support this action:

- [Button](#)
- [CheckBox](#)
- [ComboBox](#)
- [DateTime](#)
- [Div](#)
- [Header](#)
- [Image](#)
- [Label](#)
- [Link](#)
- [LongText](#)
- [MultiSelect](#)
- [Number](#)
- [Radio](#)
- [Range](#)
- [Span](#)
- [Text](#)

## Parameters

<b>Parameter</b>	<b>Description</b>
prop= <i>value</i> ;	The property name. Supported property values are: font-face, font-family, font-weight, font-style, color, font-size, background-color.
ret=& <i>variable</i> ;	The return value.

## GetLabel

### Description

Gets the label of the specified HTML object.

The following step types support this action:

- [CheckBox](#).
- [ComboBox](#).
- [LongText](#).
- [MultiSelect](#).
- [Number](#).
- [Pwd](#).
- [Radio](#).
- [Range](#).
- [RichText](#).
- [Span](#).
- [Text](#).

## Set\_Value

### Description

Sets the field value in a browser object.

The following step types support this action:

- [CheckBox](#).
- [ComboBox](#).

- [LongText](#)

Use the [SetValue\\_InModal](#) action to set the value of a long text field on a modal page.

- [MultiSelect](#).

- [Number](#).

- [Pwd](#).

- [Radio](#).

- [Range](#).

- [Text](#).

## Example

This example illustrates the Set\_Value action.

LongText	▼	Set_Value	▼	name=SQA_SIMPLEREC_SQA_DESCRIPTION	long
Text	▼	Set_Value	▼	name=SQE_SIMPLEREC_PSC_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.

The following step types support this action:

- [Button](#)

- [Chart](#).

- [CheckBox](#).

- [ComboBox](#).

- [Header](#).

- [Label](#).

- [LongText](#).

- [MultiSelect](#).

- [Number](#).

- [Radio](#).

- Range.
- Span.
- Text.

## Example

Type	Action	Recognition	Parameters	Values
Textg	Verify	ID=PSE_DATES_SQA _DATE	#TODAY	

## System Variables

System variables are populated by PTF at runtime. The following table lists PTF system variables.

Variable	Description
%case%	Current test case name.
%component%	Current component name.
%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.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.

<b>Variable</b>	<b>Description</b>
%eo.url%	Execution option URL.
%eo.user%	Execution option user.
%eo.verbose%	Execution option verbose flag.
%frame%	The current frame name.
%log.id%	Current log number.
%menu%	Current menu name.
%page%	Current page name.
%parenttest%	Returns the value of root test name of current test.
%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

<b>Parameter</b>	<b>Description</b>
<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.

<b>Expression</b>	<b>Result</b>
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

<b>Parameter</b>	<b>Description</b>
<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 a string resulting from concatenating the strings in the parameters.

## Example

The following table presents examples of using the Concat function:

<i>Expression</i>	<i>Result</i>
Concat("hello "  "and "  "welcome "  "to "  "PTF")	hello and welcome to PTF

## Date

### Syntax

Date()

### Description

Returns the current date, using the date format specified in the current execution option.

### Returns

The current date.

## Example

The following table presents an example of using the Date function, where the current date is July 4, 2011:

<i>Expression</i>	<i>Result</i>
Date()	07/04/2011

## Day

### Syntax

Day(*date\_value*)

### Description

Returns the day portion of the date value provided as a parameter.

## Parameters

<b>Parameter</b>	<b>Description</b>
<i>date_value</i>	A date value, such as the value returned by the Date() function.

## Returns

Returns the day portion of the date value provided as a parameter.

## Example

The following table presents examples of using the Day function; the second example assumes that the current day of the month is 13:

<b>Expression</b>	<b>Result</b>
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

<b>Parameter</b>	<b>Description</b>
<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:

<b>Expression</b>	<b>Result</b>
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

<b>Parameter</b>	<b>Description</b>
<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

<b>Parameter</b>	<b>Description</b>
<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; the second example assumes that the current time is between 1:00 PM and 1:59:59 PM.:

<b>Expression</b>	<b>Result</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

<b>Parameter</b>	<b>Description</b>
<i>substring</i>	The text you are searching for. The string parameter is not case sensitive.
<i>within_string</i>	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>Expression</b>	<b>Result</b>
<code>instr("ABCDEFG" "c")</code>	3
<code>instr("ABCDEFG" "C")</code>	3
<code>instr("ABCDEFG" "CDE")</code>	3
<code>instr("ABCDEFG" "zz")</code>	0
<code>instr("ABCDEFG" "")</code>	1
<code>instr("ABCDEFG" "A")</code>	1

## LCase

### Syntax

`LCase(string)`

### Description

Converts a string to lowercase.

### Parameters

<b>Parameter</b>	<b>Description</b>
<code>string</code>	The string to be converted.

### Returns

Returns a string resulting from converting string to lowercase.

### Example

The following table presents an example of using the LCase function.

<b>Expression</b>	<b>Result</b>
<code>lcase("Hello World 1234")</code>	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

<b>Parameter</b>	<b>Description</b>
<code>string</code>	A string from which to extract a substring.

<b>Parameter</b>	<b>Description</b>
<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 an example of using Left function.

<b>Expression</b>	<b>Result</b>
left("Hello World" 5)	Hello

## Len

### Syntax

Len(*string*)

### Description

Returns the length of string as an integer.

### Parameters

<b>Parameter</b>	<b>Description</b>
<i>string</i>	A text string.

## Returns

Returns an integer indicating the length of string.

## Example

The following table presents an example of using Len function.

<b>Expression</b>	<b>Result</b>
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

<b>Parameter</b>	<b>Description</b>
<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>
<code>MakeDate(Add(Year(Date()) 1) Add(Month(Date()) 11) Add(Day(Date()) 1))</code>	January 14, 2014
<code>MakeDate(Add(Year(Date()) 1) Add(Month(Date()) -1) Add(Day(Date()) -1))</code>	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

<b>Parameter</b>	<b>Description</b>
<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 <i>hour_value</i> reaches 24.  True - Returns ( <i>hour_value</i> – 24) when <i>hour_value</i> is greater than 24.  False - Returns <i>hour_value</i> even when <i>hour_value</i> 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>Expression</b>	<b>Result</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

Parameter	Description
<i>time_value</i>	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; the second example assumes that the current time is seven minutes past the hour:

Expression	Result
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

<b>Parameter</b>	<b>Description</b>
<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; the second example assumes that the current month is February:

<b>Expression</b>	<b>Result</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

<b>Parameter</b>	<b>Description</b>
<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 multiplying *number1* by *number2* rounded to *dec=dec\_places* decimals.

## Example

The following table presents examples of using Multiply function.

<i>Expression</i>	<i>Result</i>
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 an example of using the Now function, assuming that the function was called at 12:20 PM on July 4, 2011.

<i>Expression</i>	<i>Result</i>
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

<b>Parameter</b>	<b>Description</b>
<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 <i>find</i> in <i>source</i> .

## Returns

Returns a string resulting from replacing every occurrence of *find* found in *source* with *replace*.

## Example

The following table presents an example of using the 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

<b>Parameter</b>	<b>Description</b>
<i>string</i>	A string from which to extract a substring.

<b>Parameter</b>	<b>Description</b>
<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 an example of using the 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

<b>Parameter</b>	<b>Description</b>
<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 examples of using the Round function.

<b>Expression</b>	<b>Result</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

<b>Parameter</b>	<b>Description</b>
<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; the second example assumes that the current time is 25 seconds after the minute:

<b>Expression</b>	<b>Result</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

Parameter	Description
<i>source_str</i>	A string from which to extract a substring.
<i>start_pos</i>	A number representing the character position in source_str where the substring starts, starting at 1.
<i>length</i>	(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.

Expression	Result
<code>substr("12345678" 2 3)</code>	234
<code>substr("12345678" 2)</code>	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

<b>Parameter</b>	<b>Description</b>
<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 the Subtract function.

<b>Expression</b>	<b>Result</b>
Subtract(10 2 3)	5
Subtract(10 -2 -3)	15

## Sum

### Syntax

Sum(*Index|Value|Section|Delimiter*)

### Description

Sum works with the HTMLTable indexes.

---

**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.

## Parameters

<b>Parameter</b>	<b>Description</b>
<i>Index</i>	The HTMLTable index string, such as 2/5/4. An index string is the return value of CellGetIndex. See <a href="#">CellGetIndex</a> .
<i>Value</i>	The value that you want to add or subtract. The default action is addition.
<i>Section</i>	The section of the index that will be modified.
<i>Delimiter</i>	The character that delimits each section in the text value. The character must be enclosed in quotes.

## Example

The following table presents examples of using the Sum function.

<b>Expression</b>	<b>Result</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 examples of using the Time function with the regional options set to 24 hour format and 12 hour format, respectively:

<b>Expression</b>	<b>Result</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

<b>Parameter</b>	<b>Description</b>
<i>string</i>	A text string.

## Returns

Returns a string with all leading and trailing spaces removed.

## Example

The following table presents an example of using trim function.

<b>Expression</b>	<b>Result</b>
trim(" Hello World ")	Hello World

## UCase

### Syntax

UCase(*string*)

### Description

Converts a string to uppercase.

### Parameters

<b>Parameter</b>	<b>Description</b>
<i>string</i>	The string to be converted.

### Returns

Returns a string resulting from converting string to uppercase.

### Example

The following table presents an example of using UCase function.

<b>Expression</b>	<b>Result</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

<b>Parameter</b>	<b>Description</b>
<i>date_value</i>	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; the second example assumes that Tuesday is the weekday of the current date:

<b>Expression</b>	<b>Result</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

<b>Parameter</b>	<b>Description</b>
<i>date_value</i>	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; the second example assumes that the current year is 2012:

<b><i>Expression</i></b>	<b><i>Result</i></b>
Year(February 13, 2012 )	2012
Year(Date())	2012

# Reserved Words Quick Reference

## Reserved Words

The following table briefly explains PTF reserved words.

<b><i>Field or Control</i></b>	<b><i>Description</i></b>
#CHECK#	Checks a value in an object against the expected value defined in the PTF test. Updates the value if no match exists.  See <a href="#"><u>#CHECK#</u></a> .
#DIS#	Checks whether an object is display-only.  See <a href="#"><u>#DIS#</u></a> .
#DTTM	Enters the current date and time into the application.  See <a href="#"><u>#DTTM</u></a> .
#EXIST# and #NOTEXIST#	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 <a href="#"><u>#EXIST#</u></a> , <a href="#"><u>#NOTEXIST#</u></a> .
#FAIL# and #WARN#	Same as #CHECK# but do not update the value. If the values do not match, PTF logs a Fail or Warning.  See <a href="#"><u>#FAIL#</u></a> , <a href="#"><u>#WARN#</u></a> .
#IGNORE	Place the #IGNORE reserved word in the Value field of a Test Exec step to skip the call to the child test.  See <a href="#"><u>#IGNORE</u></a> .
#LIKEF# and #LIKEW#	Match strings using LIKE. If no match exists, PTF logs a Fail or Warning. PTF does not update the value.  See <a href="#"><u>#LIKEF#</u></a> , <a href="#"><u>#LIKEW#</u></a> .

<b><i>Field or Control</i></b>	<b><i>Description</i></b>
#LIST#	<p>Checks the values in a drop-down list box. Use a   to separate items in the <b>Value</b> field.</p> <p>This reserved word is used only with a ComboBox object.</p> <p>See <a href="#"><u>#LIST#</u></a>.</p>
#NOTHING	<p>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.</p> <p>See <a href="#"><u>#NOTHING</u></a>.</p>
#PREFIX#	<p>Substitutes the text in the <b>Prefix</b> field in the Test Editor for #PREFIX# in the <b>Value</b> field.</p> <p>See <a href="#"><u>#PREFIX#</u></a>.</p>
#TODAY	<p>Enters the current date into the application.</p> <p>See <a href="#"><u>#TODAY</u></a>.</p>