HP Unified Functional Testing

Software Version: 12.51
Windows ® operating systems

What's New

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What's New in UFT 12.51

UFT 12.51 includes the following new functionality and support.

- "Support for Hybrid mobile applications" below

- "Use UFT for Continuous Integration by Running Tests on a Bamboo Server" below

- "Expanded LeanFT capabilities" below

- "Product Enhancements" on the next page

- "New Supported Environments" on page 6

Support for Hybrid mobile applications

UFT can now create Web test objects for the Web objects in your hybrid apps and in the HP Mobile Web app.

Use UFT for Continuous Integration by Running Tests on a Bamboo Server

Using a special plugin designed for UFT, you can now run Continuous Integration (CI) tests on an Atlassian Bamboo server. This plugin enables you to create a task as part of your build process, run the test, and view the results as part of every CI build.

Expanded LeanFT capabilities

Connect LeanFT to HP Mobile Center to test your mobile applications	LeanFT now supports mobile testing through its integration with HP Mobile Center. Using this integration, you can test your native and hybrid apps on both Android and iOS devices. **Learn more:**http://mobilecenterhelp.saas.hp.com/en/1.50/mobilecenter_help/Content/LeanFT/LFT_Intro.htm
Run your LeanFT tests from ALM	. You can now run LeanFT tests using supported versions of ALM and the new **LEANFT-TEST** type. When you run a LEANFT-TEST, the test runs on the specified host computer. When the run ends, the overall results as well as the LeanFT HTML report are stored in ALM.
Test Java and SAP GUI objects in your AUTs	The LeanFT12.51 SDK includes full support for Java and SAP GUI technologies.
HTML Report enhancements	- Method arguments and values are presented in a table in the Step Details pane. - Additional runtime error details for failed steps. - New **Search** bar and **Next/Previous** error buttons.
Object Identification Center and Application Model	Usability and performance improvements
New supported environments	- Visual Studio 2015 - Windows 10 - Eclipse Mars (4.5) - Firefox 25-26

	For details on all supported technologies, versions, and environments, see the LeanFT Product Availability Matrix.

For more details on these and all other LeanFT 12.51 features, visit the LeanFT 12.51 Help Center.

Product Enhancements

This version of UFT has the following product enhancements:

Mobile	• **Run tests silently.** This performance improvement lets you run UFT tests on mobile apps without opening the HP Mobile Center remote access window.
	While your test runs silently, you can open the remote access window, when needed, by including a **Device.OpenViewer** step. This enables your test to perform bitmap checkpoints or run steps on Insight objects. After these steps run, your test can include a **Device.CloseViewer** step to continue running the test silently.
	• **SSL support.** You can now use SSL when connecting UFT to HP Mobile Center.
	• **Gesture support.** You can now pan (iOS), swipe, or long tap an app on a device directly in HP Mobile Center's remote access window using a mouse or other pointing device.
BPT	• You can now run a business process test in which the test's components contain application areas based on different add-ins. (In the past, the test ran based on the add-ins of the first component's application area.
	• You can automatically convert a manual component to an automated UFT component.
	• You can create a business component directly from a Sprinter XML data file.
	• You can promote component parameters to test parameters when adding a component to a business process test by using a new button in the Toolbox pane.
	• You can choose the level of automatic parameterization when creating tests: user input objects or all objects.
Flex	The FlexTable object now has a **.GetColumnName** method
SiebelOpenUI	• The SblOUICheckBox object enables you to test 3-state checkboxes.
	• Most objects now support the **Repository Name (RN)**, **UI Name (UN)**, and **TO (Test Object)** identification properties
	• The **SblOUIDropDownButton.IsEnabled**, **SblOUITable.IsRowExpanded**, and **SblOUIComboBox.Select** methods enable you to address special scenarios when testing dropdown buttons and table objects.
DevExpress application support	UFT now supports DevExpress applications, with a number of new methods added to the .NET Windows Forms Add-in.
Run results	• You can email an HTML report directly from the report tab in UFT using the **Send by Email** option.
	• You can search the run results using the new Search field in the run results tab.
	• You can quickly toggle between errors using the **Next Error** and **Previous Error** buttons.
	• You can embed the HTML report directly in the Jenkins plugin, giving you an option to open the report along with other post-build documents without having to open UFT or navigate to the run results folder and find the results file.
	For details on the Jenkins plugin, see https://wiki.jenkins-ci.org/display/JENKINS/HP+Application+Automation+Tools.
Licensing	The demo license now works on server-based operating systems.

New Supported Environments

UFT 12.51 supports the following new technologies and frameworks:

- Updated support for the latest versions of Firefox and Chrome. For details on specific browser versions, see the *HP Unified Functional Testing Product Availability Matrix.*

- Windows 10

- .NET Framework 4.6

- QT 4.8 applications built with Visual Studio 2008 or mingw gcc 4.8.2

- TE Attachment Reflection for UNIX open VMS 14.1

- TE Micro Focus Rumba 9.3

- TE Attachmate Extra! X-treme 9.3

- Flex 4.14

- SiebelOpenUI 8.1.1.14 SIA

- DevExpress 10.1.5 and 15.1

What's New in UFT 12.50

UFT 12.50 includes the following new functionality and support.

This section includes the following:

Expanding Mobile application testing capabilities

- You can now use the Object Spy to spy on controls in your mobile application and retrieve their properties. Just click on a control in your application to spy on it.

- You can Highlight a test object in your mobile application. Now, when you select a test object in the object repository, the control is automatically highlighted in your mobile application.

- You can now add standard, bitmap, and text checkpoints for any test object while recording a test.

- During a single record or run session, you can perform operations on multiple applications. Just modify the record and run settings prior to recording or editing steps on each subsequent application.

- From the UFT toolbar, you can now click a button to open a remote access window that contains the device and application you want to test. When you click the button, a dialog box opens in which you

specify the device and application you want to test. You can also specify whether you want to install, reinstall, or restart the application on the device.

Alignment of UFT recognition of Web objects across different browsers

UFT 12.50 contains a number of enhancements to create a more uniform test across all browsers:

- Some of the properties of some Web objects - including **Browser**, **WebEdit**, **WebNumber**, **WebRange**, **WebList**, and **WebFile** - have been aligned to be uniform across browser types.

- Additional Web objects are now supported on all browsers, including support on Chrome.

- You can set the browser type for a test run or recording session in the Record and Run Settings dialog box, using a data table parameter or a test parameter, instead of having to manually change the browser type each test run.

- Chrome recording now supports the ability to set Web Event Recording Configuration settings.

New UFT Extension for Firefox

UFT has now modified the UFT Extension for Firefox, enabling you to use the same extension across multiple versions of Firefox, without the need to upgrade the Extension each time a new version of Firefox is released.

This extension available by default the first time you open Firefox after the UFT installation. After you open Firefox, you only need to enable the Extension.
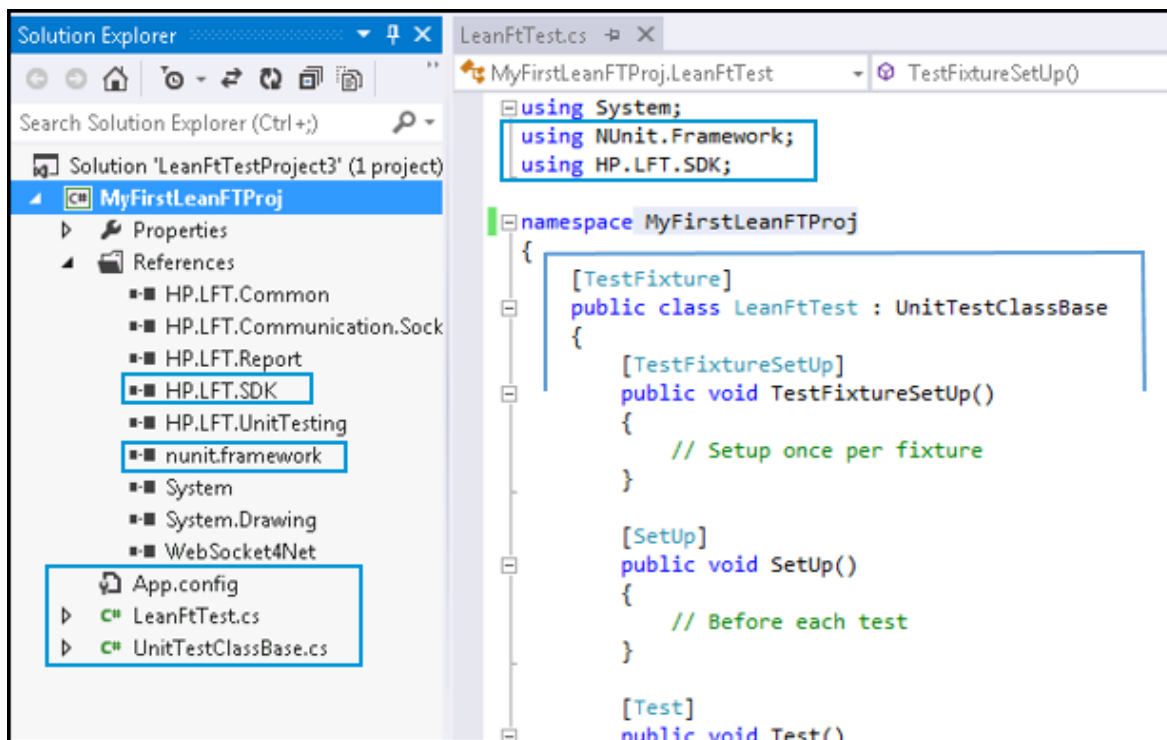
> **Note:** The UFT Agent for Firefox is supported for Firefox versions 33 and higher. If you need to test versions of Firefox lower than 33 or run tests of Java applets, you must use the legacy Firefox agent. For details, see the Web Add-in Quick Reference topic in the *HP Unified Functional Testing Add-ins Guide*.

Use Lean Functional Testing (LeanFT) to Create Functional Tests in Your Development IDE

Experienced UFT users can now use LeanFT to create test automation in developer IDEs such as Visual Studio or Eclipse using languages such as C# or Java.
Lean FT has a comprehensive SDK covering the most popular AUT technologies and provides special plugin tools for object maintenance and accelerated code generation.

LeanFT was designed to provide an easy learning curve for HP Unified Functional Testing (UFT) users. The SDK object model provides a similar set of test objects and methods, and the LeanFT Application Model and Object Identification Center tools provide functionality similar to the Object Repository and Object Spy, along with additional functionality to assist you in generating your C# or Java code.

LeanFT also provides integrations with HP products, such as ALM, and you can also integrate your LeanFT tests in continuous integration systems such as Jenkins.

You can install LeanFT from the UFT installation wizard and you can use your UFT license key to enable LeanFT on the same computer.

Alternatively, you can install the standalone version of LeanFT on a computer without UFT.

For more details, check out the Lean Functional Testing Help Center at: http://leanft-help.saas.hp.com/en/12.51/HelpCenter/Default.htm

Enhanced capabilities for creating and running BPT tests in UFT

UFT has improved your ability to use Business Process Testing in UFT, including the following:

- Use the BPT view to streamline your workflow for Business Process Testing in UFT. Using the BPT View (an alternative version of the UFT Start Page for Business Process Testing users), you can quickly start many common business process testing tasks: connect to ALM, configure Business Process Testing global settings, create or open business process tests/flows or business components, begin recording a business process test/flow or a business component, or learn tests/flows of your SAP

application.

- **Adding the canvas view for a test.** Now, when you open a business process test, you can view the test in the Canvas view (like in ALM) in addition to the grid view. This view provides different visual representation of the test. In addition to showing the overall test flow, the canvas also displays any links between the components contained in the test.

- **Ability to export and import parameter values for iterations in your test.** You can now export the parameter structure of your test's components to an Excel, and modify the values of these parameters for each iteration. After you have modified the values in the Excel, you can re-import the spreadsheet into the test and use the new parameter values for a test run. Furthermore, the Excel can be used with Test Configurations in ALM for Test Lab test runs.

- **Recording a business process test.** Now you can record all the steps in a business process test at the same time. After starting the recording session, you add components as necessary to divide the test into separate units. The steps are recorded into the relevant component and the test objects are saved with the component's local object repository, making these objects available for later use.

- **Ability to capture all or some of the objects in your application with one click.** Using the Capture toolbar, you can capture all the objects in your application or all the objects in an area of your application with one click. These objects are automatically saved to the component's local object repository for later use. This speeds up the component and test creation process, as it eliminates the need to open a separate object repository, add the objects to that repository, associate the object repository to an application area, and then associate that application area with a component.

- **Run business process tests with different test configurations directly from UFT.** Now, instead of only being able to use test configurations when running a business process test from ALM, you can run tests with different test configurations directly from UFT. This enables you to easily vary the data used for a specific business process test run without the need to manually modify multiple parameters inside the components and tests before running.

Test SAP applications with BPT using the BPT Packaged Apps Kit

You can now easily create tests and flows of your SAP GUI or SAPUI5 applications with a business process test using the BPT Packaged Apps Kit. This enables you to:

- **Learn components of the application to create a test.** Instead of you having to create individual components for each area of your SAP application, you can have UFT learn components, depending on the area of your application. UFT automatically identifies the transaction for that area of the application, and creates a separate business component for each transaction. At the end of the learning session, you are presented with the results of what UFT learned, and you can select what components to keep and discard.

- **Run tests in Change Detection mode and update components with the changes.** You can run tests on an SAP application in Change Detection mode. This enables UFT to compare changes in the

application, and then update the components based on the application's changes. At the end of the run, you can view a summary of the changes and decide what to update.

Note: Change Detection Mode is available only on ALM servers running ALM 12.21, or ALM 12.01 patch 2 or higher, or ALM 11.52 patch 7 or higher.

Lighter, HTML-based run results report

After a test or component run, you can view the run results in a lighter, faster report based on HTML. This report contains all the data for your test or component run, including information on the steps in the test flow, error information, information on the test objects and objects in your application, and stack trace information. You can also view other run results resources, such as screen captures and data tables as links from the HTML run results report.

The HTML report can also be exported or sent to other users without the need to install the Run Results Viewer on their computer.

Note: The HTML report is meant to be a compact, faster run results report. It does not contain every functionality of the Run Results Viewer. If you need the full functionality, you need to instruct UFT open your run results using the Run Results Viewer in the **Run Sessions** pane of the Options dialog box (**Tools > Options > General** tab > **Run Sessions** node).

Add a function library as a solution item

You can now add function libraries to the solution, just like a test, component, or application area. This enables you to save a function library with a solution, even if it is not associated with a test.

Note: The addition of a function library to a solution does not affect the association with any test, component, or application area.

Integration with GIT source code repositories

You can now use your UFT tests in a GIT source code repository directly from UFT. You can commit changes to a local repository or push and pull changes from a remote repository using the Solution Explorer, instead of having to use Windows Explorer or Git Bash commands to update before working in UFT.

Run UFT tests without the UFT IDE

Now you can run UFT tests (from ALM, the Test Batch Runner, the continuous integration plugin, or other tools) without the need to have the full UFT IDE installed. When you install UFT, you can choose to have only the Runtime Engine component installed. After you install the Runtime Engine, you can import or set the relevant settings to run your tests properly.

New Licensing Mechanism

UFT has switched to using Autopass as its licensing mechanism, including integration with the Autopass License Server. This enables you to install seat, concurrent, or commuter licenses in a single license wizard, without the need to use external tools to assist in the license check out, check in and installation procedures. Using the Autopass License Server, you can also manage all your concurrent and commuter licenses in a single place.

The Autopass License Server included with UFT is FIPS-compliant and uses HTTP/HTTPS for the communication protocol between UFT and the License Server. The License Server also supports use of IPv6 addresses.

Improved usability of the Keyword View

UFT has made a number of improvements to the Keyword View to improve your experience:

- When entering parameters for a method, you no longer have to click in the different sections of the Parameter column. UFT now provides a tooltip to instruct you which parameter you are entering, and you simply continue typing your parameter information.

- The test object hierarchy is flattened, enabling you to more easily view the steps included in the action or component.

- When selecting a possible parameter value, you can add a parameter directly from the Keyword View, instead of having to return to the Properties pane and adding the parameter.

New Support for applications designed with the EXT-JS toolkit

UFT now supports testing of Web applications created with the Sencha EXT-JS toolkit. This toolkit is installed as a Web 2.0 toolkit and extends Web support for EXT-JS applications.

Product Enhancements in Version 12.50

- **Flex:** The UFT Flex Add-in now supports embedded controls in a FlexTreeView object with new methods.

- **SAP:** The Add-in for SAP Solutions now supports **SAP WebDynpro Java (WDJ)** applications and **SAP Fiori** applications

  In addition, the SAPUI5 Add-in is now supported on Firefox and Chrome browsers.

  For details, see the **SAPWDJ** and **SAPUI5** sections of the *HP UFT Object Model Reference for GUI Testing*.

- **SiebelOpenUI:** The SiebelOpenUI toolkit now supports buttons with drop-down lists, with a new SblOUIDropDownButton object.

- **Oracle:** The Oracle add-in now supports menus in an Oracle application with new methods for the OracleFormWindow object.

New Environment Support in UFT 12.50

- Updated support for the latest versions of Firefox and Chrome. For details on specific browser versions, see the *HP Unified Functional Testing Product Availability Matrix*.

- Safari 7.1 and 8

- Siebel 8.1.1.11 high interactivity

- Siebel 8.2.2.4 high interactivity

- Flex 3.6 and 4.1.0

- SAPGUI 7.4

- Delphi XE7

- Hummingbird HostExplorer14 (64-bit) TE

- PowerBuilder 12.6

- Oracle 12.2.4

- VMware ESXi 5.5

- ASP .NET AJAX 4.1.5

- Ext-JS 4.2.2 and 4.2.3

- Google Web Toolkit (GWT) 2.7

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