



What's new in HP Performance Center software

Version 11.5

Driving the DevOps trend: HP Lab Management

A challenge that performance testing teams often face is setting up a lab to run the tests. Often times, they are dependent on other teams to set up the lab. There may be stringent process and time requirements that may not be feasible. Infrastructure may not be ready when the build is ready. And build readiness is often unpredictable. These dependencies could become a roadblock, especially when they need to run tests on short notice in an Agile world. Also, if the lab is not set up correctly, this can lead to issues.

HP Lab Management allows testing teams to provision and deploy a test lab themselves in a hybrid delivery environment (bare-metal or virtual, in-house or in the cloud), through HP Performance Center. Leveraging an out-of-the-box integration with HP Continuous Delivery Automation (CDA), users are able to define the infrastructure topology, application configuration, and associated components (middleware, databases, etc.), and then deploy with the appropriate application build as needed. This model-driven approach helps eliminate user errors in lab configuration, thereby making the testing efforts more relevant and accurate.

Testing teams can also schedule tests along with the lab deployment, so that the execution can be kicked off when a new build is ready to be tested.

Because the test environment can be provisioned and torn down dynamically, and not left idle, utilization of test infrastructure can also be dramatically improved through HP Lab Management.

HP Lab Management helps bring dev, test, and ops teams closer in a DevOps trend, since the same model can be used across the application lifecycle, whether in dev, test, staging, or production.

Bridging the gap between Development and Operations

HP's long-standing ability to bridge the gap between performance testing and production performance monitoring has further been enhanced in this release. HP Performance Center now can incorporate actual production performance profiles and data in order to better replicate application behavior when testing.

Information regarding production usage can now be directly imported from HP Business Service Management (BSM), or from third-party solutions such as Webtrends, to HP Performance Center. HP Performance Center gives the performance testing team insight into how an application actually is used in production and how it actually performs. This helps create better testing scenarios that reflect real production usage. Based on this insight, they are able to plan and execute performance tests that are more accurate and realistic representations of application performance.

Similarly, HP SiteScope monitoring metrics and configuration can be imported to accelerate setup in testing environment.

Virtual User Generator (VUGen): a new interface that brings insight

HP LoadRunner 11.50 introduces an innovative VUGen (Virtual User Generator) interface with redesigned IDE and Design Studio. It is now easier than ever to record, replay, and debug scripts using the new VUGen. The improvements include:

- **Usability**

- It has a modern and intuitive look and feel, flexible panes, and layouts.
- The improved editor is now context-sensitive, supports code completion, and provides enhanced coloring and formatting. It also supports editing features such as highlighting, intelli-type, watchlist, copy/paste, color coding, etc.
- A true C language debugger has been added.
- The Solution Explorer makes it easier to group multiple scripts, access script items, and perform script-related operations (e.g. comparison).
- New capabilities are added to search and replace in log and snapshots.
- Step Navigator replaces tree view for single view of the script with easy filtering and search.
- A persistent framework helps maintain a custom look and feel for the script developer.
- Context sensitive help provides needed assistance for the application element that is being used at the time, at the touch of a button (F1).

- **New Correlation Studio**

The new Correlation Studio hosts all correlation functionality in one place: record-based correlations, replay-based correlations, correlation rules, and correlation from snapshot. Correlations can now be found based on server responses during recording, in many cases eliminating the need to replay iteratively to find dynamic values. It also includes new APIs for locating parameters based on XPath and Regular Expressions. The new Correlation Studio interface and new APIs make scripting easier, faster, and more intuitive.

- **Data format extension (DFE) for Google™ Web Toolkit (GWT)**

The DFE feature is designed to simplify scripting of applications that exchange formatted data; by turning the formatted data into a more readable format the script can be easily correlated and parameterized. GWT DFE is the latest addition to the already supported formats of Base64, JSON, URL Encoding, XML, and Prefix-Postfix. GWT support includes:

- Formatting the GWT RPC data into readable and correlate-able content
- Adding more data (i.e. object field names)
- Enabling simple parameterization
- Solving specific correlations for GWT

- **Extensibility**

New in version 11.50, users can extend on the functionality of the all-new VUGen IDE itself by developing add-ins that are integrated into the user interface.

- **Collaboration**

Community sharing allows integration into the HP online community and helps the script developer to be more efficient and productive. Easily access forums, blogs, and Twitter, or add your own search engine to enable access directly from within the development environment.



- **Recording 64-bit applications**

Support for recording 64-bit applications has been added to the existing support for 64-bit operating systems. These 64-bit applications can usually be recognized when the “*32” suffix is not displayed in the Windows Task Manager for their process (replay is 32-bit based).

- **IPv6 support**

IPv6-based applications can be tested in addition to applications based on IPv4. Support includes IP Spoofing. Note: internal PC/LR communication (e.g. Controller-Load Generator) is still IPv4 based.



Seven new protocols

- **Mobile protocols**

New protocols have been added to enable developing scripts for mobile applications. The Mobile Apps protocol (in Web bundle) is used for native applications and Mobile TruClient (RIA bundle) is used for browser-based mobile applications.

- **Ajax TruClient for Internet Explorer (IE 9)**

This new addition to the Ajax TruClient family expands support to Internet Explorer (IE)-based applications. Applications that work in IE standard mode can be quickly scripted utilizing the same TruClient technology that has revolutionized scripting for Firefox Web applications.

- **Enhancements on TruClient for Firefox**

The modern Ajax TruClient Firefox protocol was moved to Firefox 8 providing better performance. It now supports HTML5 and allows creating functions to easily reuse and share code. Also added were “Think Time” recording, global event handlers to support asynchronous behavior, an API for URL filtering (black and white list), an API for setting HTTP headers, and the ability for automatic transactions per step.

- **Web protocol asynchronous support**

Support for asynchronous behavior has been added to Web (HTTP/HTML) VUser scripts, and Web-based functions inside Flex, Silverlight®, and Web Services VUser scripts. This new capability enables recording of poll, long poll, and push interactions required for advanced Web applications that contain various asynchronous communication designed to keep the information current and up to date. These unique communication patterns are recognized automatically and the recorded script is updated accordingly.

- **Web Services enhancements**

The Web Services protocol includes new features for better security support, improved handling of WCF (Windows Communication Foundation). The Web Services protocol includes the following enhancements: improved UI for security settings including addressing versions, easier certificate selection, flexible definition of signature and encryption algorithms, the option to exclude timestamps, and support of custom extensions to WCF.

- **Flex enhancements**

New capabilities have been added to better support Flex environment. These new capabilities include:

- Web correlation mechanisms (rules, studio, and response-based correlation, Web correlation APIs)
- Web requests support
- Adobe® Flex platform jars bundled in the product so application jars are not needed for message serialization
- RTMP FMS streaming, RTMPT and RTMPS, and GraniteDS support

- **.NET4 support**

With this release, .NET4 support has been added to the existing support for .NET frameworks 2-3.5.



Analysis enhancements

A set of enhancements were added in the analysis, such as:

- New RTMP (real time messaging protocol) Flex Graphics
- TruClient breakdown graphs
- Ability to apply granularity to many graphs
- Global option of absolute/relative time on graphs

Integration with Service Virtualization

HP Service Virtualization helps “virtualize” components, and hence helps remove dependencies. Integrate with HP Service Virtualization and use simulated services to facilitate load testing business processes that contain services that are not readily available or too costly.

VUGen for HP Business Process Monitoring

For customers that leverage scripts from VUGen to HP Business Service Management (BSM), it is required to record HP Business Process Monitoring (BPM) scripts using VUGen. The following enhancements were added on Business Process Monitoring:

- **Scripts parameterization**
Support script parameterization from within BSM script repository to reduce script maintenance overhead.
- **Easy script upload**
Multiple scripts can now be uploaded into an existing folder in the script repository using drag-and-drop functionality.

A new set of supported environments

- Microsoft® Windows Server® 2008 R2 SP1
- Windows® 7 SP1 (32 and 64 bit)
- Internet Explorer® 9

Languages supported:

English, Japanese, German,* French,* Spanish,* Italian,* Russian, Dutch, S-Chinese, Brazilian Portuguese, Korean*

*New languages added on HP LoadRunner 11.50

For more information

Data sheets and white papers: hp.com/go/performancevalidation

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