HP Performance Center software





HP Performance Center software is an enterprise-class performance engineering software, designed to facilitate standardization, centralization, global collaboration, and management of a performance engineering center of excellence.

Achieving enterprise-wide performance validation

Driving quality through a standardized performance testing platform

Whether you want to standardize on a specific testing platform or develop a performance testing center of excellence (CoE), you can base your performance testing initiative on HP Performance Center software.

HP Performance Center is built on HP LoadRunner, the industry-leading performance testing software and hence inherits all the capabilities of HP LoadRunner.

- Test a broad range of applications, including the latest Web and Mobile technologies, ERP/CRM applications, and many legacy systems.
- Run high-scale tests using minimal hardware, including any mix of physical and virtual environments, including public Cloud infrastructure.
- Identify end-to end performance bottlenecks using advanced monitoring and analysis tools, and ensure that new or upgraded applications meet the performance requirements of your business.

It has a management framework on top providing a Web-based, globally accessible platform that facilitates enterprise-wide testing and collaboration.

HP Performance Center is available for 24x7, concurrent use, regardless of whether performance testers are in any part of the world.

You can plan and execute tests across multiple concurrent projects and people by sharing and scheduling software/hardware resources.

Centralize. Consolidate. Control.

Distributed application performance testing teams with multiple products often result in over-investment in licenses, hardware, and software. The first step toward increasing your ROI is to standardize your software and consolidate your testing resources. HP Performance Center lets globally distributed performance engineers share a common testing infrastructure and execute multiple performance tests concurrently and continuously. Licenses and resources that were distributed across various projects can be consolidated into one central, easily accessible pool. This makes license management much easier, eliminates redundancy of hardware and software, and makes resources more accessible to various projects. Scheduling of test resources helps optimize resource utilization. License pooling enables customers to buy exactly what they need, and helps reduce license costs.

A central install makes installation and upgrades easier. All of this cuts the cost of enterprise load testing and increases ROI.

A source of support for your IT environment

As the types of applications you deploy change from Web to Java to Web 2.0 to legacy applications, it becomes more difficult to find one solution for all of your performance testing needs. With support for more than 60 protocols and a protocol software development kit, which allows partners to create protocols, HP Performance Center provides a broad range of coverage and support for your strategic IT initiatives from ERP/CRM deployments and upgrades to application modernization initiatives. The new, browser-based HP TruClient scripting technology supports next-generation AJAX applications. HP Performance Center also supports testing for a variety of platforms including application in the cloud as well as on mobile platforms.

We also have an extensive community of third-party solution providers. You can be sure that no matter how diverse your quality assurance requirements are, our solutions can meet your needs.

"Performance Center tools enable alignment with testing COE objectives and goals"

Engineer, Small Business Insurance Company (TVID: 8D4-739-2FF)

Scale up tests leveraging the Cloud

HP Performance Center provides the ability to seamlessly leverage public cloud infrastructure to deploy load generators (LGs) to scale up and down based on your performance testing needs, without complicated network configuration.

With cloud testing, you can quickly and elastically scale up tests to meet the demands of your customer-facing business applications, reducing the cost and overhead of managing dedicated machines.

The deployment of cloud-based LGs is built into Performance Center, significantly reducing provisioning time, while maintaining security and control.

In Performance Center, cloud accounts can be centrally configured via Lab Management, and LGs can be allocated to individual projects or managed centrally. You can provision hosts using standard templates or by creating your own, managing cloud host usage through built-in reporting.

You can execute load tests in a hybrid mode with a mix of load generators within your network and load generators in the cloud. You can also use the software in a fully cloud mode through Performance Center as a service.

Started:

Number of Hosts provisioned and checked:

10:50 AM Feb 2013

The process at the proces

Figure 1. With HP Performance Center Cloud testing you can quickly and elastically scale up tests to meet the demands of your customer-facing business applications

Mobile application Testing

HP Performance Center is the most complete solution for mobile application performance testing; including Mobile Web, Native and Hybrid applications. The Mobile TruClient protocol supports the rapid testing of browser-based mobile applications, and the Mobile Applications protocol provides support for native, Web and Hybrid applications

HP solutions for mobile testing can be used to test mobile applications against any platform and OS. HP Performance Center seamlessly integrates with **Network Virtualization** enabling realistic network conditions during each test.

Continuous delivery: A better means to measure application behavior

Closing the gap between production and test, HP Performance Center can incorporate actual production performance profiles and data in order to better replicate application behavior when testing.

Real user sessions monitored by HP Real User Monitoring (RUM) can be converted to performance testing scripts. Information regarding production usage can be directly imported from HP Business Service Management (BSM) or from third-party solutions such as WebTrends, IIS Logs and Google Analytics 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, SiteScope monitoring metrics and configuration can be imported to accelerate setup in the testing environment.

operations lifecycle Application lifecycle Define business Monitor applications and the end-user for application experience. Develop the Diagnose the root performance cause of issues conjunction with the test process. Integrated solutions Test performance Resolve application continuously performance throughout the Deploy fully Change the application based on issues. tested applications. lifecycle performance data

Figure 2. HP Performance Center enables Performance management across the application lifecycle

Continuous Testing: A solid platform for agile testing

To enable load testing earlier in the application lifecycle, there are integrations with the leading J2EE, Microsoft® Visual Studio, and Microsoft .NET environments that let you create scripts directly within the IDE, so that developers can participate in the performance testing efforts earlier.

This becomes particularly relevant in the case of Agile development. Using REST based apis, performance tests can be triggered after every build and deployment.

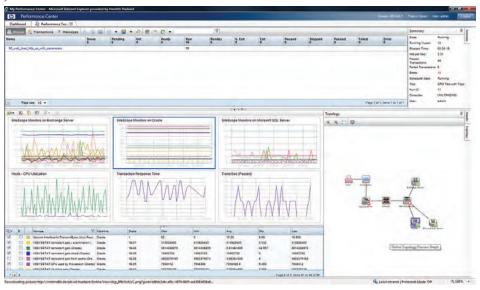
Integrated Diagnostics

In addition, HP Diagnostics Profiler allows developers to view and debug performance issues at the code level within their development environments and desktops.

Eves on your infrastructure topology

HP Performance Center also includes a topology module, which helps you define the infrastructure topology of the system under test. A high percentage of issues actually result from misconfiguration of the infrastructure and machines. Often times, testers don't know the details of the infrastructure they are testing against. Having everything in one place with the tests helps keep a record of the configurations, so that you know exactly what you are testing against, and keep track of changes between iterations. The visual topology also facilitates setting of monitors so that you can see exactly what is happening in the system as you run your tests.

Figure 3. HP Performance Center shows the status of the transactions, systems, and machines online as you run the test



Coverage that tracks defects back to relevant requirements

HP Performance Center supports defining of performance requirements such as SLAs in your tests. When defects are detected, those can be tracked back to the requirements to see if critical requirements are affected. You can also see a coverage report of all requirements to track the exact status of your projects, so that go/no-go decisions can be made appropriately. HP Performance Center provides visibility into the test status across the enterprise.

Monitor trends across multiple tests

Testing is typically an iterative process where you run a test, analyze results, make necessary changes, and then run a test again until optimum performance is achieved. It is important to be able to quickly determine how the application performance is progressing over multiple consecutive iterations of tests so that appropriate changes can be made. HP Performance center includes HP Sitescope which is an agentless application monitoring software solution, that allows testers to monitor the application during the test.

This becomes particularly relevant in the case of Agile methodologies where there exists the concept of multiple sprints and iterations.

HP Performance Center provides performance trending information across multiple tests. You can define a baseline and set up reports that help you quickly see how the application performance is trending over subsequent iterations, and how the application is performing against the defined SLAs.

Click here to know more about the performance testing center of excellence.

A case for building a performance testing center of excellence

Increase organizational efficiencies

In addition to selecting a standard load testing solution, many companies are moving to an IT shared services model, called a performance testing CoE, to increase productivity and standardize processes. The efficiencies gained by creating a CoE with HP Performance Center include increased testing productivity, improved collaboration across application teams, and the ability to outsource some or all of the tactical work of load testing. A CoE facilitates sharing of best practices and skills, and enhances your organizational efficiency by quickly delivering testing capability throughout the enterprise. In short, a CoE model increases your infrastructure and human resources utilization, and eventually drives better quality across the enterprise.

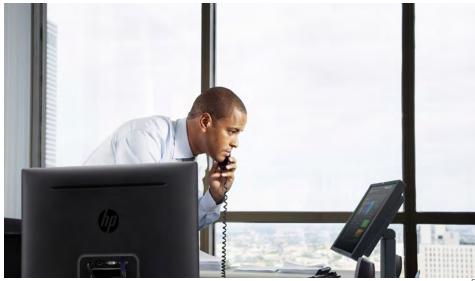
Collaborate across the enterprise

Performance testers gain 24x7 Web access to all testing operations, including uploading test scripts, scheduling load tests, creating load test scenarios, running multiple load tests, monitoring test executions, and analyzing results. When tests execute, any number of users can remotely observe the test and configure customized views of the application under test. HP Performance Center provides a collaborative infrastructure so that project managers, developers, and performance engineers can all view load testing data, progress, and run information in real time. HP Performance Center increases collaboration within teams with features such as Web-based access, asset sharing, project grouping, and version control.

Test performance in context

HP Performance Center adds a "project" concept to the load testing process—all load testing goals, scripts, scenarios, results, users, and resources are assigned to and managed in the context of the project. It also supports project-grouping such that smaller projects can inherit assets from larger projects.

Project-level dashboards and business reports provide a clear view of project progress, process, and resources used. Privileged management is role based and per project, allowing users to see and interact with only the projects relevant to them. Resources are allocated per project so that the correct amount of infrastructure is available on demand to the project team. In addition, you can track project progress across releases and over time.



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Identify the performance testing model that suits your needs

For very large organizations, the best choice may be a hybrid solution: a CoE to focus on the most visible and critical projects in the company, and a standard, shared, testing utility that all other groups can leverage to run their own performance testing efforts for smaller projects. HP Performance Center supports a dual-use model, allowing the CoE to focus on the larger projects while lending external technical support and other IT services to remote groups or development teams.

Get robust management

HP Performance Center provides enterprise-level management, including user administration and rights management, role-based privilege management, project-level resource allocation, and usage auditing features. HP Performance Center also provides robust systems management to operate, manage, and maintain the load testing infrastructure. In real time, your system administrators can see the operational status of all HP Performance Center resources. In addition, remote patch administration and remote reboot capabilities provide centralized control over a globally distributed load farm.

Integration fosters testing quality

HP Performance Center can integrate with HP ALM to provide reporting into the quality of an application or project across the entire testing lifecycle. Once it integrates, it becomes an integral part of ALM so that for a single project, you can see the status of the manual, functional, performance, and security tests to determine the exact quality of the application at any given time. Integrated dashboards provide executives with complete visibility into the application quality.

Enhancing production monitoring

HP Performance Center also has tie-ins to HP BSM solutions for production monitoring, completing the performance lifecycle. Scripts built from HP Performance Center can be used for production monitoring within HP BSM. Similarly, from the RUM component of HP BSM, a real user session can be converted into a script for performance testing. Production usage data can be shared from HP RUM to HP Performance Center. Also, HP SiteScope as well as HP Diagnostics technologies are shared across HP Performance Center as well as HP BSM. This helps bridge the gap between testing and operations.

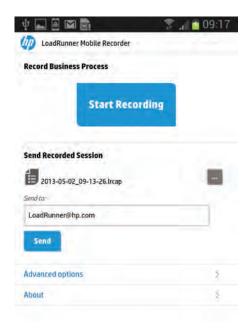
How HP Performance Center works

Using HP Performance Center's Web-enabled user interface, you can concurrently execute and monitor multiple tests from work or home, or schedule them to start unattended. Relevant testing assets, such as test scripts, load test configurations, test data, and analyzed results are stored in HP Performance Center for easy access, sharing, and reuse.



Support for mobile applications

HP Performance Center is a comprehensive solution for mobile application performance testing—both browser-based as well as native applications. HP TruClient extends as HP Mobile TruClient to support testing for browser-based mobile applications. A mobile applications protocol provides support for native applications. HP solutions for mobile testing can be used to test mobile applications against any platform and OS. HP Performance Center seamlessly integrates with Shunra Network Virtualization solutions enabling WAN simulation conditions.



Key features and benefits

- Supports performance testing of new technologies together with your existing, legacy applications
- Accurately tests a mix of mobile and Internet users
- Decreases the risk of deploying systems that do not meet performance requirements
- Reduces hardware and software costs by accurately predicting application scalability and capacity
- Helps you establish intelligent SLAs before applications go live
- Shortens test cycles to accelerate delivery of high-quality applications
- Pinpoints end-user, system-level, and code-level bottlenecks rapidly and with ease
- Reduces the cost of defects by testing earlier in the application lifecycle.

About HP Software suite

HP Software solutions help modernization initiatives deliver business outcomes instead of failing under the burden of outdated, legacy delivery mechanisms. Where rival solutions mistake the software development lifecycle for a total picture of the application, HP sees core delivery in the context of the complete application lifecycle—from business idea through retirement. Furthermore, by providing unified management and automation solutions, HP offers customers not simply more tools and integrations but greater simplicity. The result for enterprise application teams is improved predictability, repeatability, quality, and change readiness in both the core and complete lifecycle.

HP Performance Testing offerings

Performance testing from anywhere, for any size and any type of environment. The agility in how business wants IT to deliver has drastically increased. HP's objective is to provide a menu of options on performance testing solutions to support any type of environment, application, methodology, maturity, and consumption model that the customer have to allow them to accelerate the delivery applications that perform with quality.

HP provides high-quality software and services that address all aspects of your software application lifecycle needs. With HP, you have access to standards-based, modular, multiplatform software coupled with global services and support.



HP Performance Testing is available via:

- Permanent Licenses
- Term Licenses (daily, monthly, 3 months, 6 months, 1 year terms)
- HP Performance testing in the Cloud
- HP Performance testing as a Service (TaaS)
- HP LoadRunner delivered by partners
- HP Performance Center via HP SaaS

HP SaaS can host and maintain your Performance Center instance. Some of the key benefits of HP Performance Center on SaaS include:

- The availability of cloud-based load generators located in multiple locations and the option to connect your own for behind the firewall testing
- The option to quickly and easily ramp up and down virtual users to extreme levels
- The ability to consume HP PC in a pay-as-you-go model with operational expense budgets
- Subscription pricing for TCO and predictable IT expenditures
- Multi-layer security with less risk
- 24x7x365 support
- · Built-in and on-demand scalability

HP Services

Connect with peers and HP Software experts. Visit the HP Enterprise Business Community.

Join our blog: hp.com/go/lrblog

Get the most from your software investment.

HP provides high-quality software services that address all aspects of your software application lifecycle needs. With HP, you have access to standards-based, modular, multiplatform software coupled with global services and support. The wide range of HP service offerings—from online self-solve support to proactive mission-critical services—enables you to choose the services that best match your business needs.

For an overview of HP software services and to access technical interactive support, visit hp.com/go/hpswprofessionalservices

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