Can you meet your performance optimization challenges?

Today, it’s a challenge to keep your mission-critical applications at peak performance and scalability levels as defined by the business. You need an effective way to predict system behavior and performance under realistic stress conditions. In addition, when problems or bottlenecks occur, you need a quick way to diagnose the root cause and fix the problems.

To address the challenge of application performance, many enterprises over-buy hardware in the hope that robust processing power and throughput capacity will be sufficient to handle peak loads. This is a costly approach, which ultimately might not accomplish what it is intended to do. The answer doesn’t necessarily lie in more servers, processors, or memory.

It lies in a testing solution that enables IT staff to validate and tune the performance of applications based on expected load conditions. This solution must also scale from simple, project-based testing, to a full-scale testing Center of Excellence (CoE) that consolidates hardware, standardizes best practices, and leverages global testing resources.

HP Performance Center

HP Performance Center is a suite of integrated performance testing solutions that can emulate hundreds or thousands of concurrent users to apply production workloads to virtually any environment; identify potential performance bottlenecks; and help diagnose and fix the root cause of the problems. Using Performance Center, testing teams can stress an application from end-to-end—applying consistent, measurable, and repeatable loads—and then use the data to identify scalability issues that could impact users.

HP Performance Center components

HP LoadRunner software is used more than any other testing solution in the world today. Using a record and playback mechanism, it helps you drive production workload to the test environments. As it drives load against the system, HP LoadRunner captures the end-user response time of key business processes and transactions to determine if service level agreements (SLAs) can be met. Non-intrusive, real-time performance monitors obtain and display performance data from every application tier, server, and system component; and the data is correlated with the transaction data to quickly pinpoint problem areas.

HP LoadRunner gives you the ability to record and replay at various levels, from the GUI level down to the transport and socket level, depending on the level of customization required. This flexibility to choose the level of recording facilitates use by both technical as well as non-technical personnel. It supports a broad range of applications, including new Web 2.0 technologies as well as legacy application technologies. HP LoadRunner helps you test your application, diagnose problems, and deploy without surprises.

HP Performance Center software is an enterprise-level performance testing platform that enables the formation of a performance testing CoE or a performance testing shared service. It is a Web-based solution that can be accessed globally, 24x7. It enables around-the-clock usage, thereby increasing utilization of resources and reducing cost. It also provides capabilities such as asset sharing, project grouping, and simultaneous viewing of tests that enable process efficiencies and collaboration across the team.
A Web-based topology view lets you define the test environment and monitor against it.

HP Performance Center provides complete traceability from performance requirements (or SLAs) to the defects, thereby showing the exact quality of the application against business needs; and also includes trending so that you can compare the performance of the application over multiple tests and iterations. It provides everyone from the executives to the line-of-business (LOB) managers to the testers visibility into the status of the projects as well as to the quality of the applications.

HP Performance Center can integrate with HP Quality Center as part of HP Application Lifecycle Management (ALM) suite to provide complete visibility in the overall quality of an application across the entire lifecycle.

HP Diagnostics helps pinpoint the exact root cause of performance bottlenecks on the application tier, and reduces the mean time to resolution (MTTR) in J2EE, .NET, SOA, and ERP environments. It drills down from slow, end-user transactions to the bottlenecked application component, method, or SQL statement; helping resolve memory exceptions and other common problems quickly. It integrates with HP LoadRunner or Performance Center to correlate end-user transaction issues directly to the application code problems, thus providing, complete end-to-end visibility into transactions. It provides actionable information to resolve application level performance problems quickly and easily.

About HP BTO Application Solutions

HP application solutions help ensure modernization initiatives deliver business outcome 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.

Connect across the application lifecycle

HP Performance Center helps support performance testing across the complete Application Lifecycle. It supports developer testing by providing easy access to testing resources, as well as with developer-oriented products such as the Diagnostics Profiler. It integrates with HP Application Lifecycle Management (ALM) to provide visibility into the quality of an application or project across the entire testing lifecycle. Integrated dashboards give executives complete insight into the overall quality of the application across functional and performance testing as well as complete requirements coverage and defect statuses.

HP Performance Center also has tie-ins to HP Business Availability Center for production monitoring. Scripts built from HP Performance Center can be used for production monitoring within HP Business Availability Center. Similarly, from the Real User Monitoring (RUM) component of HP Business Availability Center, a real user session can be converted into a script for performance testing. Also, common technologies such as HP SiteScope and HP Diagnostics help bridge the gap between testing and operations.

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