

Is your organization trying to achieve modern delivery with legacy mechanisms?

HP Business Technology Optimization (BTO) Applications is a portfolio of integrated software that helps IT application modernization initiatives realize better business outcomes by effective management and automation of the application lifecycle.

Companies have spent the last few years pursuing application modernization with the aim of greater business agility, increased innovation, lower costs, and a richer user experience. However, the means of modernization—distributed global teams, iterative methodologies, composite applications, Web 2.0 technologies, and Cloud-pose new challenges to application organizations. In fact, many organizations have embraced these initiatives without fully accounting for the logistical complexities of making them work. Simply put, too many organizations are trying to manage modern delivery with legacy, outdated mechanisms. The result is a loss of visibility into delivery progress, inefficiencies due to an increase in manual tasks and duplication of effort, poorer application quality, less responsiveness to business change, and higher total cost of ownership.

HP BTO Applications software solutions help ensure modernization initiatives yield positive business outcomes. And, HP sees core application delivery (that is the Software Development Life Cycle) in the context of the complete application lifecycle—from business idea through retirement—as key to achieving positive business results. By providing unified application lifecycle management and automation software, HP offers customers greater simplicity, not simply more tools. The result for enterprise applications teams is improved predictability, repeatability, quality, and change readiness in both the core and complete lifecycle.

HP Application Lifecycle Management

A single, integrated platform to manage the complete application lifecycle.

HP is delivering the industry's first unified software product for core application lifecycle management (ALM) built on a single platform designed to drive complete ALM from inception to retirement. Built on a common foundation and easily extended through a modern and open architecture, HP Application Lifecycle Management software accelerates business innovation by empowering IT applications teams to plan, build, and release applications, components, and business services with high quality and minimal delay.

HP Application Lifecycle Management removes the gaps between IT team silos and disjointed work processes related to project planning, requirements definition and management, development and testing activities, defect tracking, and application readiness and release. It provides complete line-of-sight across teams throughout the application lifecycle, preparing all stakeholders for the impact of change driven by application transformation and modernization and reducing the "time to know" that can result in the lack of delivery readiness. HP Application Lifecycle Management manages the lifecycle across all application aspects (architecture, functionality, performance, and security) with a single software platform, an integrated repository, consistent user experience, and a set of extensible application programming interfaces.

Figure 1 Plan, track, and manage the lifecycle of modern applications with HP Application Lifecycle Management software





"HP Quality Center software gives us the information we need to support quality across the development cycle. We can now do much more than simply catch defects. We can contribute to reducing the risk of defects in the first place and help streamline both QA and development processes. And we can do it with fewer resources than we needed previously, while supporting more software applications than ever before." David Moses, QA manager, Delta Air Lines

Quality management and functional testing

HP Quality Center software

Industry-leading requirements, test, and defect management.

HP Quality Center software is a complete quality management platform that scales from a single project to multiple, enterprise-wide projects and releases. It enables quality assurance (QA) organizations to manage application quality with a consistent, repeatable process that reduces risk and costs, and increases efficiencies for testing and QA teams across the organization.

HP Quality Center is available standalone or as a core part of HP Application Lifecycle Management software. It delivers requirements management, release and cycle management, test management, defects management, and reporting all within a single platform, providing traceability and visibility across your entire process.

HP Quality Center also drives communication and collaboration among business analysts, QA, and development teams. It is a Web-based solution, giving distributed teams access to a steel thread of critical project information regardless of geographic and organizational boundaries. Simply put, it delivers the information you need to make informed application release decisions.

HP Service Test Management software

Prepare your quality teams for the challenges of modern architectures.

HP Service Test Management software extends HP Quality Center to address the challenge of composite applications and shared services by providing management and information about compositions and dependencies. Access to this information allows QA to test earlier in the development lifecycle, determine impact to the rest of an application when a change is made to a service or component, and execute only the tests needed to validate the change. This capability can shorten test cycles and allows QA to respond more quickly to modifications made by developers.

HP Business Process Testing software

Bridge the quality gap between subject-matter experts and quality engineers.

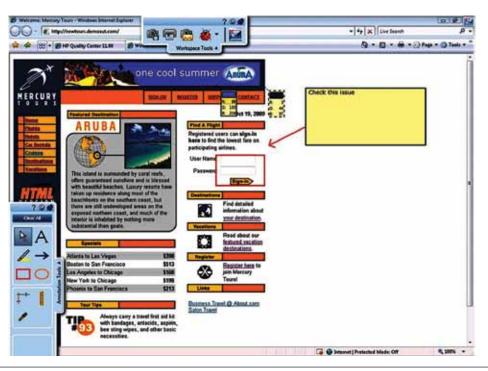
HP Business Process Testing software brings business analysts into the process of defining business use cases and process flows and using them to increase the accuracy of tests, aligning testing more closely to business outcomes. With HP Business Process Testing, test engineers define tests based on the defined business processes, create reusable test components using both manual and automated methods, and share them with distributed quality teams for testing within HP Quality Center. Now you can take creating tests and testing frameworks to a higher level, improving efficiency and test coverage with less in-depth technical knowledge.

HP Unified Functional Testing software

Simplify testing from user interface to back-end services.

HP Unified Functional Testing accelerates functional testing for all modern applications by simplifying test design and maintenance for both GUI applications and non-GUI (headless) components.

Figure 2 HP Sprinter: A new era in manual testing



It provides functional and regression test automation for every major software application and environment, including advanced Web 2.0 toolkits, leading development technologies, headless services, and ERP and CRM applications. Simplified approaches to test design and maintenance, including keyword and visual drag-and-drop, extend testing to more individuals in your organization, while maintaining flexibility and control for power users. And in addition to independently validating GUI applications and headless components, HP Unified Functional Testing can validate and report on an integrated test scenario of a process as it traverses through multiple GUI and non-GUI layers of a composite application, reducing risk and improving the overall quality of your modern applications.

HP Sprinter software

Introducing a new era of manual software testing.

While automated testing can deliver significant efficiency benefits to testing teams, manual testing is often still required to accomplish testing objectives. Manual testing processes and tools also offer opportunities for increased efficiency through innovations. HP Sprinter software, a core testing component of HP Quality Center software, is a manual testing revolution. Fully integrated with HP Quality Center and HP Application Lifecycle Management software, HP Sprinter is easy to use and dramatically improves both tester productivity and the accuracy of manual software testing. Manual test scripts are launched from HP Quality Center into HP Sprinter where the tester carries out the test. Testing actions and results are simply recorded

within HP Quality Center. Defects can also be directly logged within HP Quality Center, clearly communicating and bridging the gap with developers.

HP Sprinter handles the automated injection of data into the fields being tested, increasing the speed and accuracy by which a test can be executed. The advanced toolkit included within HP Sprinter allows screen capturing, screen annotation, movie recording, mirror testing, and system information. Simply put, HP Sprinter has changed the game.

Requirements definition and management

HP Requirements Management software

Help your diverse teams collaborate effectively.

HP Requirements Management software is a core module of HP Application Lifecycle Management software and HP Quality Center that allows distributed teams to collaborate and share requirements while they manage multidimensional traceability among requirements, tests, and defects across releases and cycles—all within a single, centralized repository. It is a functionally rich, easy-to-use, Web-based solution designed for business analysts, QA, and development teams across the entire application lifecycle. Through accurate requirements and risk-based test management, development and testing teams gain clear visibility and can focus their efforts on high-priority business needs, so they can help ensure that decisions to proceed are based on quantifiable business risk.

Figure 3
HP LoadRunner: The industry's most widely adopted software for automated load testing



Performance management and validation

HP Performance Center software

Manage and meet performance goals across your application portfolio.

HP Performance Center software enables testing of a broad range of applications, including Web 2.0 and Rich Internet Applications, business applications, and legacy technologies. It supports individual project-based testing and scales up to support a Center of Excellence for multiple projects and teams. It is available as a separate software product that is fully integrated with HP Application Lifecycle Management software so that performance validation can become a core part of the entire lifecycle management process. Through this integration with HP Application Lifecycle Management, performance validation activities and results can be managed from requirements to testing to defect management with complete traceability.

HP Performance Center delivers 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 diagnose and fix the root cause of the problems. Using HP 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 LoadRunner software

The industry's most widely adopted software for automated load testing.

HP LoadRunner software is used more than any other load testing solution in the world today, according to independent analysts. Using a record and playback mechanism, it helps you drive production workload to your test environments, removing the main barrier to performance testing across your applications. As it drives load against the system, HP LoadRunner captures the end-user response time of key business processes and transactions to determine whether SLAs can be met and business results delivered. Non-intrusive, real-time performance monitors obtain and display performance data from every application tier, server, and system component. This data is correlated with the transaction data to quickly pinpoint problem areas.

HP LoadRunner gives you the ability to record and replay at many architectural levels, from the GUI level down to the transport and socket level, depending on the skill set available and the level of customization required. It supports the industry's broadest range applications and protocols, including new Web 2.0 technologies as well as legacy application technologies.



"Maintaining a centralized portfolio of HP technology management tools allows McKesson to support our applications development groups more cost-effectively. And we know the software we release meets our customer's expectations, from quality and performance through security." Todd Eaton, director for Applications Lifecycle Management Tools and Services, McKesson Corporation

HP Test Data Management software

Test more and test faster by breaking the logiam of access to test data.

Access to test data can be one of the major inhibitors to timely and comprehensive application quality management and testing. Modern applications depend on complex data designs that spread across multiple databases that can be both internal and external to a company. Manually extracting relevant subsets of distributed data and maintaining referential integrity is challenging and error-prone for testing teams.

HP Test Data Management software allows organizations to accelerate and improve testing processes by creating de-identified, relevant subsets of data in an automated and repeatable infrastructure. It works with HP Application Lifecycle Management software, HP Quality Center, and HP Performance Center, reducing the time to extract and access test data and removing compliance risk through flexible data masking, for both manual and automated testing.

Application security

HP Assessment Management Platform software Manage and extend application security across

the application lifecycle.

HP Assessment Management Platform software is an enterprise-class security management solution that addresses the complexities of today's Web application security programs. HP Assessment Management Platform gives chief information security officers, business managers, security professionals, QA, and development teams the ability to extend their Web application security program across the entire application lifecycle. It provides management tools and integrated automation for tying security testing to requirements, tracking test plans, and communicating results as defects and in dashboards and reports.

IT applications teams gain an enterprise-wide view of their Web application security program and their application security testing coverage and risk profile,

and they increase their return on investment by making intelligent risk-based security management decisions across their applications. HP Assessment Management Platform works with HP security testing solutions, HP QAInspect software, and HP WebInspect software to help ensure application security is core when managing quality application delivery.

HP QAInspect software

Make security a first-class participant in your testing plans and processes.

With HP QAInspect software, you can introduce security testing earlier in the application lifecycle and find security risks and defects when they are less costly to fix. It allows QA professionals to incorporate fully automated Web application security testing into their overall test management process without the need for highly specialized security knowledge—and while reducing the risk of slowing aggressive product release schedules.

HP WebInspect software

Your power tool for delivering more secure modern applications and mitigating business risk.

HP Weblnspect software performs Web application security testing and assessment for today's complex Web applications. WebInspect delivers fast scanning capabilities, broad security assessment coverage, and accurate Web application security scanning results. HP WebInspect identifies security vulnerabilities that are undetectable by traditional scanners. With innovative assessment technology such as simultaneous crawl and audit and concurrent application scanning, you get fast and accurate automated Web application security testing and Web services security testing. HP WebInspect works with HP Assessment Management Platform to scale your application security program and testing processes across your enterprise.

Service Oriented Architecture (SOA) and composite application governance

HP SOA Systinet software

Gain predictability and repeatability through visibility, policy management, and control.

HP SOA Systinet software provides your IT applications and enterprise architecture teams with a rich set of capabilities for establishing and managing consistency across the application development process and ensuring conformance to IT architectural and technical policies.

HP SOA Systinet is based on an extensible repository and user environment that simplifies the process of publishing and describing application components and shared services, their interfaces, dependencies, and associated service level objectives (SLOs) and service level agreements (SLAs). It provides an automated way to apply and enforce the consistent adoption of technical policies and best practices so that component-based and service-oriented applications can interoperate, integrate, and meet business objectives. HP SOA Systinet is available as a separate software product that uses open, standard interfaces to integrate with HP Application Lifecycle Management software. HP SOA Systinet also integrates with a number of industry-leading run-time policy enforcement software and appliance gateways to extend governance to the complete lifecycle for consistency and control of SLAs in production. In short, while HP Application Lifecycle Management software helps you deliver the right applications, HP SOA Systinet helps ensure they are delivered the right way.

Extensibility for the Complete Application Lifecycle

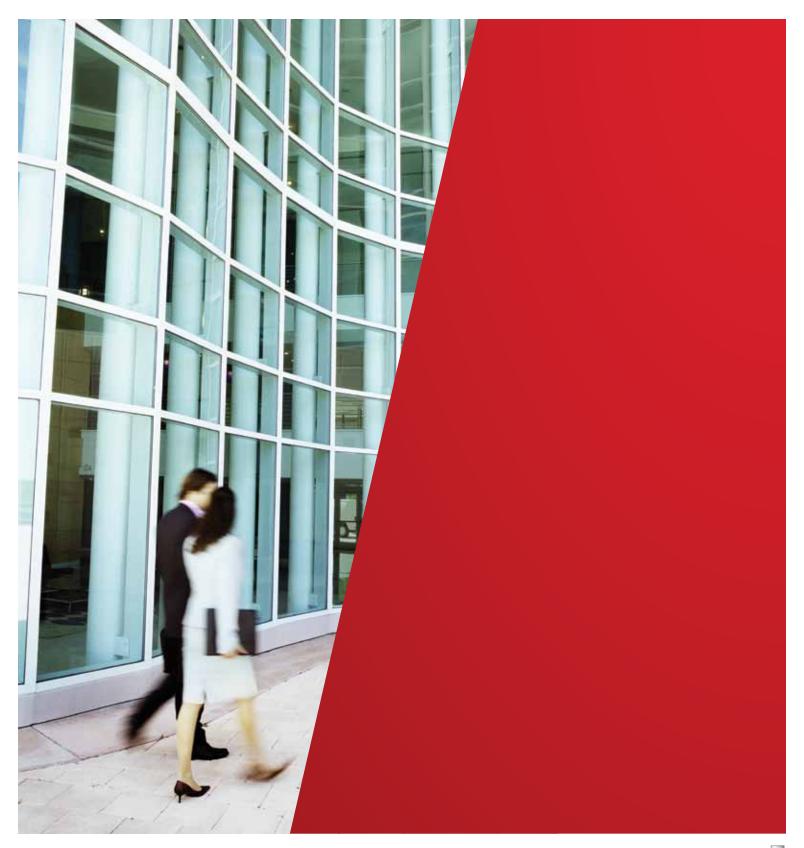
Together, HP Application Lifecycle Management software, HP Quality Center, HP Performance Center, and HP SOA Systinet effectively support your applications teams in improving core ALM—from construction to delivery—and are also designed to integrate seamlessly with the complete, or extended, application lifecycle. HP supports seamless integrations upstream with HP Project and Portfolio Management software supporting the Project Management Office, and downstream into production operations to reduce overall application cost of ownership.

HP offers proven and supported integration with planning (HP Project and Portfolio Management), deployment operations (HP Business Availability software and HP Diagnostics software), and change/configuration and service management (HP Service Manager software). In addition, run-time policies and SLAs can be designed using HP SOA Systinet, associated with applications and then deployed (via a UDDI registry integration) and configured at run-time in policy enforcement points and gateways, bridging the operational policy management gap between applications and operations. In addition, applications can be discovered at run-time and brought into the HP SOA Systinet repository for change impact analysis via HP uCMDB integration with HP SOA Systinet. Only HP offers such a complete and holistically integrated solution for the complete application lifecycle.

About HP BTO Applications software

HP BTO application software and solutions help ensure modernization initiatives deliver their desired 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 application lifecycle.

Accelerate business innovation by managing your applications lifecycle; visit www.hp.com/go/ALM
Connect with peers and HP Software experts; www.hp.com/go/swcommunity



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