

# HP APPLICATION LIFECYCLE MANAGEMENT SOFTWARE

Data sheet

In today's instant-on enterprise, business innovation is fueled by nimble software applications. And predictable, high-quality application delivery is now more important than ever. HP Application Lifecycle Management (HP ALM) software is a powerful, unified platform for your application teams to plan, build and accelerate delivery of the secure, reliable applications that drive innovation and enhance customer satisfaction.

## Modern application delivery demands modern solutions

Your business demands more from IT. But you face decades of investment in legacy IT infrastructure and applications. How can you innovate faster and deliver richer software functionality now while maintaining quality and keeping costs down? Success begins by embracing application transformation designed to assess, modernize and manage your application portfolio. And, application modernization is vital to transform your software portfolio to meet business needs. However, the means of modernization—distributed teams, iterative methodologies, new architectures such as service-oriented and composite applications, Web 2.0 technologies, mobile platforms and cloud-sourced components—pose new challenges to your teams. In fact, many organizations have embraced modernization without fully accounting for the logistical complexities of making it work.

HP ALM is designed for teams tasked with managing the logistical complexities of delivering modern applications at the speed of business. A role-based platform, HP ALM manages all aspects of application delivery from requirements through development, testing and readiness for delivery.

## Application modernization challenges release predictability

Today's modern applications are made up of many moving parts. Composite application architectures are being rapidly adopted as they are easier to change. However, managing components and services across disparate teams to deliver a composite application is difficult. Traditionally, releases have been managed in project silos. Communication among disparate teams suffers while application delivery tasks across composite application teams must be orchestrated predictably, stressing management processes. IT often manages groups of services and composite applications as enterprise releases or in "enterprise release trains." The components ready for production are included in the release; those components or services that aren't ready must wait until the next release train. This volatile combination—managing more moving parts and dependencies and aligning release trains—is addressed with ALM software.

## Change readiness demands cross-team visibility and intelligence

The only thing constant for today's application teams is change. As change readiness drives breaking up monolithic applications into shareable components built and tested by distributed and outsourced teams, the challenge for the application project manager is to quickly assess health and status of the application release and to address impact of a change. This can be overwhelming without automation and insight. ALM software is foundational for delivering the right information to the right people at the right time to adjust plans, address change impact and ultimately deliver predictably.

## About HP ALM software

HP ALM is a unified platform for managing and automating activities, insight and assets to deliver applications from requirements through development, testing and readiness for delivery. HP ALM integrates with upstream project portfolio management software and downstream deployment, monitoring and incident management software to drive complete lifecycle management of applications from inception to retirement. With HP ALM, application teams can deliver modernized applications up to two times faster, while reducing production issues by 80% on average.

HP ALM is founded on the proven HP Quality Center platform and expands HP Quality Center Enterprise software with enhanced functionality to address the ALM needs of enterprises from projects to enterprise release trains. HP ALM is ideal for adopting an application center of excellence (COE) approach. HP ALM supports driving consistent processes, shared best-practices and asset sharing across projects, and improves collaboration across business analysts, development and testing teams. Built on a standards-based, easily extended architecture and centralized repository, HP ALM is one of the first unified technology-agnostic application delivery systems available now.

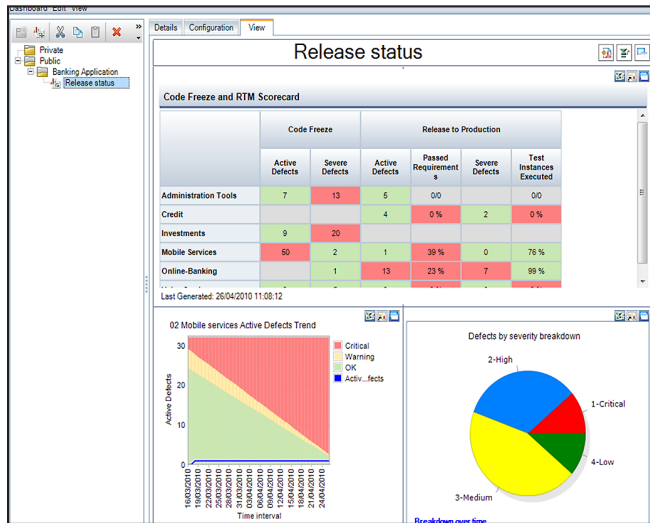
## Key HP ALM features and benefits

**Project Planning and Tracking:** Predictable application delivery needs awareness of progress and alignment with goals and milestones, and the ability to access updated information without relying on error-prone manual data gathering. HP ALM enables teams to define, track, measure and report project milestones and key performance



# “Implementing HP application modernization solutions across the entire lifecycle helped us realize savings of several million dollars over a three-year period.”

Todd Eaton, Director, CTO Office – Development Support Services, via *Healthcare IT News*, Nov. 30, 2010



**Figure 1.** Example HP ALM Project Planning and Tracking milestone scorecard

indicators (KPIs) with Project Planning and Tracking. Project managers, release managers and quality assurance (QA) managers can define and configure the project plan, its cycles, the milestones (quality gates) and associated KPIs (exit criteria) for each type of task being managed. Reports are generated, visualized in a scorecard and exported to other tools including mobile devices. And, HP ALM, through its traceability capabilities, automatically updates the progress of the project allowing risks to be highlighted upfront.

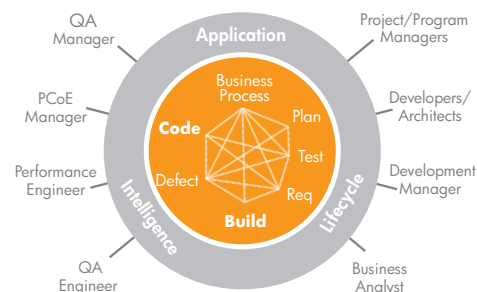
**Application Lifecycle Intelligence:** Embedded in HP ALM, HP Application Lifecycle Intelligence (HP ALI) is an action-oriented decision support system for modern application delivery. HP ALI surfaces real-time insights into who is working on what, when, where and why, at a granular level from coding to testing, managing and assessing the risk of changes and aligning to requirements. HP ALI data drives decision points and provides insights into how to optimize resources and change project priorities to attain release objectives and deliver against business expectations.

HP ALI leverages the HP ALM software framework for traceability to assess the risk of change all the way from source code to tests, requirements, and up to projects and business processes. And, HP ALI delivers traceability in real-time, linking artifacts through integrations, easily added through HP ALM’s open, standards-based integration architecture.

**Cross-project management:** Lack of standard processes, workflows and metrics across an enterprise can create inconsistencies across projects, resulting in varying release quality and delivery timeframes or increased costs from ad-hoc adoption of best practices. HP ALM software supports standardized processes powered by workflow, and standardized policies and metrics. Consistency is easily supported with HP ALM templates with mandatory steps and user-defined fields that can be created centrally and propagated automatically across multiple projects.

**Asset sharing and re-use:** Many applications within an organization can be changed simultaneously as part of different projects, creating a need to share and reuse requirements and tests across multiple projects, particularly to verify that changes to one application don’t negatively impact another, producing rework. HP ALM supports shareable asset libraries that can be reused across projects while maintaining traceability. Specific changes can be applied to shared assets for each project while allowing the library to maintain its integrity, and projects can re-synch with the library as needed, incorporating any change that has occurred. In addition, HP ALM provides cross-project defect collaboration.

**Figure 2.** Accelerated application delivery powered by HP ALI



**Cross-project reporting:** To gain full insight into all your applications initiatives and make informed enterprise release decisions, you need a holistic view of your enterprise release with the ability to drill into individual projects. HP ALM provides cross-project reporting with aggregated project status metrics, application quality metrics, requirements coverage, and defect trends for both an enterprise release and individual project view.

**Development management integrations:** Developers are key stakeholders in the application lifecycle. Tasks driven by the creation and update of requirements and finding defects through the testing process must be communicated to developers without requiring them to learn additional tools. HP ALM provides supported integrations into integrated development environments (IDEs), including Eclipse and Microsoft Visual Studio, Build Systems and Source Code Change Management (SCCM) Systems for linking developer tasks, requirements and defects throughout the lifecycle. Using HP ALM, developer tasks and code changes are tracked against requirements in order to track project progress and evaluate risk. And with HP ALM, change actions, such as the checking in of updated source code, can be linked to associated requirements and tests so that developer actions can trigger requirements management and testing decisions.

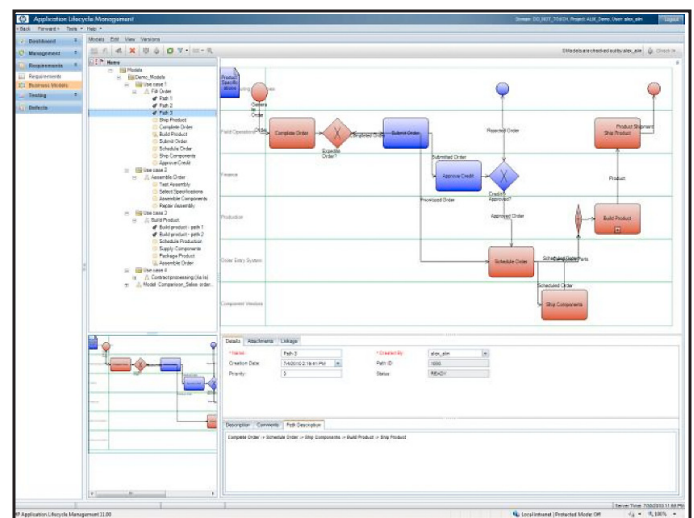
## Features and benefits shared by HP ALM and HP Quality Center Enterprise

**Requirements definition and management:** Managing requirements is vital for alignment between business demands and IT application delivery. Both HP ALM and HP Quality Center Enterprise support a functionally rich foundation for requirements definition and management. Key capabilities include linking and structuring requirements to imported business process models and evaluating path coverage; configurable templates; a rich text editor which provides a Microsoft Word-like experience without leaving HP ALM; the ability to view requirements coverage at project or release level; trace relationships between requirements, process paths, defects and test coverage; and the ability to link requirements directly to tests, developer tasks and defects to ensure alignment in the face of change.

**Quality assurance across functional, performance and security:** HP ALM is built on the proven foundation of HP Quality Center and is one of the industry's most functionally complete platforms for test planning and management including:

- **Risk-based test planning and management:** Define, manage and track all test script types (functional, performance and security) in one place. Coupled with risk-based test management, stakeholders can assign business risk to requirements, and calculate where to apply testing resources. Advanced test-planning capabilities allow functional, regression, load, unit and integration testing—each with its own set of requirements, schedules and procedures. With HP ALM, QA teams can emulate business processes and run tests unattended during off-peak times, define and share test cases and business process test components, and execute manual and automated testing with integrated results.

- **Version control:** Version control is enabled for requirements, tests and test assets to enable distributed teams to collaborate and manage multiple versions of assets in parallel while maintaining data integrity and providing an audit history of changes throughout the project lifecycle.
- **Baselining:** Baselining captures a group of requirements, tests or test assets at strategic points in the project lifecycle to mark specific milestones. Baselines can be compared to assess change impact and enable rollback.
- **Quality release and cycle management:** Release and cycle management enables quick development and testing cycles and breaks large projects into meaningful phases. Release efforts can be planned by identifying requirements and tests for each cycle and attaining real-time visibility into actual versus planned testing status to make informed go/no-go decisions.
- **Test scheduling and execution:** Control and schedule execution of all manual and automated tests including unattended execution and execute manual tests with our innovative manual testing environment, HP Sprinter. View and assess test execution runs and results, and log defects with run details.
- **HP Sprinter—integrated manual testing:** HP Sprinter is targeted at increasing the efficiency of manual testing activities and capturing intelligent defect information for faster resolution by development teams. Fully integrated into HP ALM and HP Quality Center Enterprise, HP Sprinter improves tester productivity and accuracy with easy to use screen tool bars, screen annotation, video and textual test step capture, intelligent defect logging, automated data injection for repetitive testing, and mirrored platform support to execute one test targeted on multiple platforms. HP Sprinter is particularly valuable to teams conducting exploratory testing and manual testing frequently in iterative environments.
- **Defect management:** Defects found once an application is in production cost over 100% more to fix. HP ALM and HP Quality Center defect management identifies, manages, tracks and enforces defect resolution across the application lifecycle. Testers can create functional, performance and application security defects manually or directly from the execution of manual and automated tests, and communicate them to developers with context from linked requirements and test execution results.



**Figure 3.** Importing a business process model in HP ALM and aligning business process to requirements

## HP Application Lifecycle Management and HP Performance Center software

HP Performance Center integrates with HP ALM, providing performance validation with a single view into the status of manual, functional and performance requirements, tests and defects, and a common user experience. As a result of the unified platform, HP Performance Center customers can apply ALM as well as performance validation across their projects and releases by upgrading to HP ALM.

## HP Application Lifecycle Management and HP Application Security software

Application security is a critical element of overall application quality. As such, application teams are realizing that application security is a fundamental aspect of ALM and should not be left to production teams. HP offers a proven portfolio of application security software including dynamic web application security testing with the HP Application Security product family and static code analysis with the HP Fortify 360 software suite. Dynamic and static application security testing activities and results can be integrated into HP ALM and drive application lifecycle progress and decisions from requirements to test coverage, test execution, defect management and reporting.

## HP Application Lifecycle Management and Agile

Application teams are turning to Agile methodologies to increase responsiveness to change. HP ALM supports Agile delivery by enabling teams to track project status, accelerate testing, reduce cost, improve development and QA collaboration, and manage both Agile and non-Agile projects in parallel. Teams can leverage HP ALM and the HP Agile Accelerator software, providing an Agile user experience to define user stories, manage Agile workflow across development and QA, and aggregate project status.

## HP Application Lifecycle Management Mobile

Application modernization embraces mobility and more users are looking to drive day-to-day execution on mobile devices. Available on the iPad, iPhone and iPod Touch, HP ALM Mobile delivers the untethered experience to view reports and dashboards, run manual test scripts, attach images and photos to test results, and create and view defects—all while away from the desktop.

## HP Application Lifecycle Management Software-as-a-Service

HP offers HP ALM as both software for use inside an IT organization's data center as well as via Software-as-a-Service (SaaS). HP ALM as SaaS can accelerate deployment and productivity via: platform consolidation, a team of HP ALM platform experts, simplified management, scalability built-in and on-demand, and software support to free up time to focus on innovation.

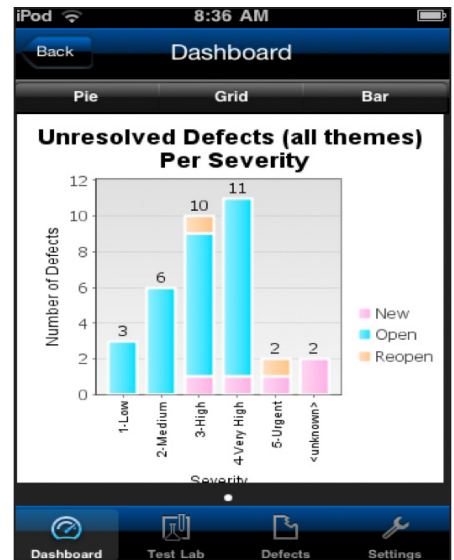


Figure 4. HP ALM Mobile, ready for the wireless universe

## HP Application Lifecycle Management Professional Services

HP ALM Professional Services provide testing expertise; innovative service delivery models; and design, implementation and education services for industry-leading HP ALM software. HP ALM QuickStart packages provide HP best practices and knowledge transfer to implement HP ALM software in as quickly as two weeks.

### To learn more

Accelerate application modernization for better business outcomes; visit [www.hp.com/go/ALM](http://www.hp.com/go/ALM).

Start engaging with HP Software-as-a-Service at <http://saas.hp.com>.

Connect with peers and HP Software experts at [www.hp.com/go/swcommunity](http://www.hp.com/go/swcommunity).

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