



HP Application Lifecycle Intelligence plugin for Bamboo

Shorten release cycles and improve application quality by tightening collaboration between Java developers and application QA teams.

Executive summary

To respond to changing customer demands, organizations must shorten software release cycles. Many companies are moving to agile methods to be able to rapidly address changing business needs. To make agile and other iterative methods work, application teams need to have real-time communication and visibility across the team and across the application lifecycle. However, many organizations are using a variety of best-of-breed tools throughout the application lifecycle that cause information to be scattered and difficult to share. This makes collaboration and communication between teams difficult, which can slow down release cycles and make agile methods difficult to implement.

HP Application Lifecycle Management (ALM) has long been the leading quality management platform. HP Application Lifecycle Intelligence plugin for Bamboo extends this leadership by linking code changes to ALM artifacts, allowing Java developers and tester to collaborate in real time, reduce risk, and increase efficiency, productivity, agility and application quality.

Overview

HP Application Lifecycle Intelligence plugin for Bamboo is a unique offering from HP Software Professional Services that packages our intellectual property honed by our vast experience in helping enterprises improve their development and quality practices. It enables you to integrate Bamboo server, Subversion source control management, and the ubiquitous Eclipse IDE with HP ALM to create a single system of record that provides traceability from requirements through code changes and build metrics to tests and defects. Application teams, management stakeholders,

the testing organization, and Java developers gain context and visibility, delivering the following capabilities:

Better decision making

Providing detailed information about the content and the stability of new builds helps the development manager and the project manager better align resources. By analyzing the magnitude of effort required to address a requirement, user story, issue, or defect, development managers and project managers can optimize the necessary resource allocation for making the proposed change. Furthermore, it allows them to understand the risks to the application associated with the change. In addition, managers can assess the progress of a single iteration or the overall release by understanding the exact functionality that the updated build is poised to deliver.

Greater predictability

Testers gain visibility into what is about to be transitioned from development to testing – the content, functionality, stability, and coverage of the new build. Based on this information, testers can more effectively plan their testing (e.g. focus on the more fragile components of the build), and project managers and development managers can better track the release progress and adjust resources and priorities. They can perform risk-based test planning by analyzing the level of complexity associated with the requirements and the code that implements them. This visibility into the health, stability, and risk of the build can further assist with decisions regarding the readiness of the build for production.

Context-aware development

Developers can now better understand the functionality that their code should deliver as they are able to – from within their IDE – view the requirements or defects that provide the basis for their specific tasks. When developers

are able to view the business requirements, history of change sets, and latest defects that are associated with specific code, they not only better understand the context of what has been completed but can better estimate what should be addressed going forward.

Faster defect fixing

Linking defects to code gives developers access to full defect details, eliminating the traditional “ping pong” between developers and testers, trying to understand the full nature of the defect. Developers are then able to zero in on the area in the code associated with the defect, and deliver fixes faster.

Change impact analysis and risk assessment

In a world of increasing demand for faster innovation while cutting costs, addressing risk should always come first. Understanding change is both one of the most difficult tasks during a development project and the best method for preventing issues in production. Knowing what requirements are linked to a specific piece of code, as well as their criticality, allows development managers to assess the risk associated with code changes.

Aligning resource allocation with business priorities

Because developers have visibility into requirements and defects, they can focus their attention on implementing requirements that are more critical to the business or fixing the most impactful defects. At the same time, QA teams can now understand what was changed in the code so that they can focus their testing resources on the right priorities.

Improving governance

Today, most IT organizations lack the ability to control or monitor changes to code that are checked in by developers. They cannot tell whether code changes are linked to any business justification. If the changes are unnecessary or unplanned, they may lead to

longer release cycles and errors in production code. Using a source code version control system does not address this issue. Although code changes are checked in, they are not linked to the defects or business requirements that motivated their development. The end-to-end traceability provided by the HP Application Lifecycle Intelligence plugin for Bamboo affords management the ability to ensure that development work occurs when and where it is needed most.

Continuous delivery

Out-of-the-box metrics such as average success rate of unit test, average build success rate, defect remediation, and requirement coverage are automatically updated and accessible in real time. After application teams have the metrics in place, they can easily compare preset SLAs to performance, and rapidly assess whether the build is ready to move on to either testing or production.

Benefits

Boost productivity

When developers and testers can collaborate in real time, know what they need to focus on, and have the information they need, and managers are able to allocate resources based on business priorities, the application team functions as a cohesive unit, boosting its productivity.

Minimize risk

With visibility into code changes and build stability, end-to-end traceability, and access to dashboards and reports based on real-time metrics, you can make the right decisions regarding risk.

Reduce cost

With improved governance, better decision making, and predictability come the cost reductions that everyone desires. Developers and testers focus on what is important and are able to prioritize based on business requirements, eliminating waste and unnecessary work.

Increase application quality

Enabling testers to better plan, and developers to better code and more quickly fix defects, yields faster release cycles without trumping quality.

The HP Software Professional Services difference

HP provides unmatched capabilities with a comprehensive set of Quality Management consulting and implementation services and unique intellectual property that help you deliver high quality applications faster and accelerate innovation.

- Fast time-to-value: our services get you up and running, automating your testing efforts in a matter of weeks
- Proven quality management and testing solution implementation expertise
- Significant experience helping large, complex, global organizations realize value from their HP Software investments
- Unique intellectual property to accelerate your value realization

- Technology-agnostic implementation approach with no vendor lock-in, no rip-and-replace
- Rich intellectual property and unparalleled reach into product engineering
- Education and support services to ensure adoption

Only HP Software Professional Services brings together consulting expertise and the industry-leading test automation solution to help you automate faster and perform better.

For more information

Contact your HP representative or email HP Software Professional Services in your region:

AMS: amsalmpsoawat@hp.com

EMEA: hpsw-pso-emea-alm-mcs@hp.com

APJ: hpswpsopajlmswat@hp.com

hp.com/go/almprofessionalservices

Learn more at

hp.com/go/ali

Sign up for updates

hp.com/go/getupdated



Share with colleagues



Rate this document

