Bringing Agility to Development Management

The HP-CollabNet partnership comes from the industry need to implement an end-to-end Application Modernization and Rationalization strategy to become more competitive and better positioned to respond to change. The solution is a common Application Lifecycle Management (ALM) platform that scales to the enterprise to drive transformation, collaboration and visibility.

The integration between HP Quality Center software and the CollabNet TeamForge™ platform creates a bi-directional synchronization of requirements, development and test artifacts to automate interdependent processes. This combined solution enables business analysts, project managers, developers and QA team members, each working exclusively within their tool of choice, to improve visibility, communication and collaboration among teams – ultimately improving the quality and success of their software projects.

Successful development platforms must be flexible to accommodate a mix of technologies, stakeholders and development methods (Agile, waterfall or hybrids), but an iterative and integrated approach delivers the software project at a competitive pace. In order to efficiently bring quality software that meets the needs of the market, organizations need:

**Dramatically Improved Business Agility:** Automatic handoffs and integration from the business team to the development team, empowers management at all levels to respond quickly and adapt to changing business requirements. Business Agility includes scalable traceability among all of the stakeholders in the enterprise including those responsible for requirements, source code, builds, tests, lab management and defects. The net result of the joint solution is increased collaboration between BA-Dev-QA to optimize business outcomes that matter.

**Unparalleled Visibility and Traceability:** Improved visibility into the application lifecycle enables stakeholders to perform accurate estimation and adjust release schedules. With this solution, stakeholders can easily trace which requirements belong to which source code, which source code check-in belongs to which defects, which defects belong to which test cases and so on. This level of visibility and traceability facilitate compliance with ever increasing regulations.

**Scalable Stakeholder Collaboration:** Are you limited by the current generation tools optimized for workgroups, not the enterprise? Project teams are getting up and running using a combination of vendor, open source, home-grown tools and integration scripts. Replace fractured tools and data that are costly to maintain and isolate teams and projects. Integrated tools, a shared repository and a culture of collaboration foster the innovation needed to bring a quality product to market. Integration allows each team member to use his or her own tools.
CollabNet — Expertise and Commitment

CollabNet has been focused on enabling distributed development since it founded Subversion, the open standard in software configuration management (SCM), more than 10 years ago. Since that time, the company has dedicated resources and effort to the platform, building a strong reputation as a pioneer in collaborative development.

CollabNet is the most widely-used platform for collaborative development in the cloud, with more than 2 million hosted users. CollabNet TeamForge is an Application Lifecycle Management platform designed for distributed software development teams. Optimized for Subversion and integrated to other SCM system, TeamForge is a scalable and integrated suite of development, change, issue and lab management tools. Public and private-cloud enabled, TeamForge supports multiple development methodologies in a single interface – Agile, waterfall or a hybrid – letting customers create a single source-of-truth across all development projects, teams and environments.

As part of the HP Quality Management Ecosystem, CollabNet contributes access to the rich TeamForge ALM platform through the CollabNet Connector Framework. It is an open-source adaptor platform for the development of reusable connectors between the TeamForge and other system trackers. The Connector provides the real-time synchronization of requirements, tasks, and other development artifacts so they are associated directly with source code.

HP Quality Center, an enterprise quality management platform, combines requirement, test and defect management into a single, globally accessible web-based platform. It is used by QA teams, developers and business analysts to plan, manage, test and verify the quality of IT and application projects and environments. Through integrated defect prevention, complete quality planning, in-depth risk analysis and change impact analysis, manual and automated testing, issues tracking and real-time visibility into project status and progress, stakeholders can intelligently and pro-actively manage the enterprise and project release process and make timely and informed release decisions.

Dramatically Improved BUSINESS AGILITY
Automated handoffs between stakeholders shortens the development and testing cycles helps IT to deliver bug-free software on time

Unparalleled Visibility and TRACEABILITY
Improved accountability with the ability to track and maintain the relationships between requirements, source code, tests and defects

Scalable Stakeholder COLLABORATION
Improved collaboration between globally distributed teams—project managers, business analysts, developers, scrum masters, product owners and testers

USE CASE
A Developer in India, using her favorite Eclipse development environment (IDE) can access the application requirements defined by a Business Analyst, located in US, working in HP Quality Center; similarly, a defect logged in HP Quality Center by a tester in China is accessible to the Developer via the integration.
How it works

The HP Quality Center Requirements and Defects Modules are synchronized to TeamForge through workflows where use cases and defects -- associated with test results -- are routed to the developers for fixing while maintaining the associations with source code.

The above diagram illustrates how the joint solution works. Using the HP Quality Center Requirements Management Module, business analysts or Scrum product owners write user stories. These stories flow into the CollabNet TeamForge platform. The development manager or Scrum teams can then create tasks from the stories. Simultaneously, testers can write code, build tests, and plan for regression suites. The TeamForge platform is used to hand over the code to deployment in the production center, where it is maintained and monitored.

QA team members work in HP Quality Center, and developers work in their CollabNet TeamForge project workspace via any browser, their IDE or using one of CollabNet open source desktops for Microsoft Visual Studio, Eclipse or Windows.

Because both parts of the solution support mixed development methodologies, each stakeholder is able to work in their own environment, using a web-enabled platform. Status updates keep all stakeholders aware of progress and issues to be resolved. This distributed view can be scaled in all directions by division, organization, geography, project or responsibility.

Value of the combined solution

Working together, HP and CollabNet offer a true end-to-end ALM solution that helps companies transform to become more competitive and better positioned respond to change. The integration offers efficiency improvements that translate to higher quality software delivered at a faster velocity. Enterprise-wide, stakeholders can stay in their specialized environments and still take advantage of improved processes.

The common Application Lifecycle Management platform provides the benefits enterprises need today—real time visibility and traceability, collaboration across stakeholders and process automation that leads to improved quality, time to market and business agility.