

# HCL Flexiem™

Balancing development flexibility with effective control of software and hardware assets.



It's a question of balance. On the one hand, your organization is accountable for delivering business value, which isn't easy because development is as much an art as it is a science. Working with distributed teams, adopting new and different development methodologies, and ensuring compliance with an increasing number of mandates all add complexity. On the other hand, software developers and hardware designers prefer to work in a development environment where they have unfettered access to the information and assets they need to create high-quality products.

To achieve this balance, a software or hardware configuration management system must offer the following:

<p>Scalable deployment for either centralized or distributed development models or a combination of both. Scale to accommodate small workgroups as well as large, geographically distributed enterprises.</p>	<p>Maintain development flexibility with Integrated Development Environment (IDE) extensions, integrations with open source and third-party tools, cross platform support, remote access and disconnected / offline usage.</p>	<p>Protect intellectual property and secure high-quality code/designs with state-of-the-art role-based access control of all assets.</p>
<p>Balance individual and team needs through development and integration stream models, private workspaces and public integration areas.</p>		<p>Increase productivity with parallel development support, automated workspace management, asset reuse and activity-based change management.</p>

HCL Flexiem has been innovating for over 25 years to provide solutions for these challenges. HCL Flexiem can help organizations by balancing flexibility with the organization's need for control. It provides controlled access to soft assets, including code, requirements, design documents, models, schematics, test plans and test results. Parallel development support, automated workspace management and baseline management enable you to create applications rapidly. Secure version management and reliable build auditing help ensure high-quality code with unmatched traceability. Development and integration models, private workspaces and public integration areas allow you to work quickly and independently, yet collaborate effectively with the team. User authentication and authoritative audit trails help your organization meet compliance requirements with minimal administrative hassle for you. And with access virtually anytime, anywhere, HCL Flexiem gives you the freedom to work efficiently where and when you need.

## SCALABLE DEPLOYMENT FOR THE ENTERPRISE

HCL Flexiem deployments can support thousands of users, working at dozens of sites, managing terabytes of data. Whether your team is a small workgroup at a single location or a highly-distributed team spanning multiple geographies, HCL Flexiem software provides the scalability you need for your evolving organizational needs.

HCL Flexiem supports heterogeneous environments and cross-platform development on both distributed and mainframe systems. You can develop using a wide choice of operating systems including Microsoft Windows and Linux environments. On the server side, your organization can choose from a variety of supported platforms to store assets while you and your teammates continue to work in your preferred IDEs.

With HCL Flexiem, you can always be confident that you're working on the right versions of the right artifacts. HCL Flexiem manages and controls source code, libraries, documentation, binaries, hardware designs, web artifacts and virtually any project artifact that can be represented as digital content. It also controls versioning for directories, subdirectories and all file system objects. Developers can see the version, branch and file they are working on simply by viewing the HCL Flexiem version tree. In addition, HCL Flexiem offers access to advanced functions that allow you to delete previous versions, create and delete branches, list version histories, and compare and merge versions.

## SECURE VERSION MANAGEMENT AND IP PROTECTION

HCL Flexiem provides a robust centralized repository where all development assets are captured and versioned in a secure way. Access control helps ensure that only authorized individuals may access particular files or make changes. User authentication is performed through operating system authentication mechanisms or through industry standards.

Lightweight Directory Access Protocol (LDAP) or smart cards (ex. PIV / CAC). Support for user- and group-based permissions limits access to files and directories. Support for role-based access control lists (ACLs) allow detailed reusable access control definitions across the organization. User-based locks are available on HCL Flexiem objects (branches, labels, elements and metadata). Programmatic authorization can occur based on the action being performed

## PROCESS CONTROL AND TRACEABILITY FOR COMPLIANCE

HCL Flexiem provides effective authoritative build auditing. It helps streamline the edit-build-debug cycle and accurately reproduces software versions. HCL Flexiem also provides the ability to automatically generate a detailed software bill of materials, which is used to determine when built objects can be reused or shared by developers using multiple views. By detecting dependencies, reusing derived objects (built artifacts) wherever possible and producing detailed build audit trails, HCL Flexiem helps ensure the reproducibility of software versions and improve build performance.

HCL Flexiem and HCL Traxiem change management products work together to allow you to define and manage changes to software assets as activities. Through the Unified Change Management capability, file versions in HCL Flexiem are grouped into logical activities and associated with change requests in HCL Traxiem. This activity-based approach enables you to manage your work at the task level, instead of managing individual files. You have a complete view of how development events, including defects and proposed project changes, affect specific files, versions, baselines or releases.

## DEVOPS FOR IMPROVED TIME TO VALUE

Many problems can occur during software development: bugs that have been corrected reappear, previous releases of software are impossible to find or cannot be rebuilt, files mysteriously change or disappear, builds that previously worked suddenly break.

The later in your software development cycle that you find a bug, the higher the cost and the greater the risk of delays. Through secure version management and reliable build auditing, and by automating build and release activities, HCL Flexiem helps to prevent mistakes, reduce bugs and identify errors earlier in the delivery cycle to resolve them more quickly.

HCL Flexiem gives you freedom of choice. You can work from where you want, using the integrated development environment (IDE) you want, on the platform you want. HCL Flexiem has created an open Change Management Integration API to support first-class integrations with change management tools. In addition to our integration with HCL Traxiem, we also support Atlassian Jira and Rational Team Concert.

For more information, please contact us at [products-info@hcl.com](mailto:products-info@hcl.com)