Integrity for Software Configuration Management

POWERFUL CROSS-PLATFORM SOFTWARE CONFIGURATION MANAGEMENT PROTECTS CRITICAL SOFTWARE AND LIFECYCLE ASSETS, PROVIDES AN AUDIT TRAIL OF CHANGE, AND SUPPORTS THE SOPHISTICATED DEVELOPMENT ACTIVITIES OF TODAY’S GLOBAL AD TEAMS, SUCH AS PARALLEL DEVELOPMENT AND SOFTWARE AND REQUIREMENTS REUSE.

Challenges

Never before has complexity in development been as great — or the need for improved control so necessary.

Improve Control Over Software Development

Bringing control to a seemingly chaotic software development environment is the challenge facing nearly every global company in today’s economy.

There are condensed project timelines and accelerating development schedules. There are multiple software repositories scattered around the globe with little visibility into their contents.

There is remote and offshore staff to manage. Multiple releases to manage. And there is a heightened need for software quality and process maturity.

Software development needs to be well managed, repeatable and documented, with sufficient insight and control over development activities, to ensure projects are completed on time and within budget.

The Solution

You are seeking a time-tested, enterprise-class configuration management and versioning solution able to protect critical software assets and support sophisticated development efforts.

Integrity, a PTC product, for software configuration management grounds PTC’s end to end coverage of the application lifecycle with the most technologically advanced and enterprise scalable configuration management system available on the market today.

• CTOs gain improved management insight into global software engineering operations.

• Software Quality Managers achieve greater software quality, reliability, and stability.

• Development and Project Managers have predictable development lifecycles and release schedules and repeatable, well-defined processes.

• IT Auditors are assured by complete audit trails for regulatory compliance.

• Developers gain real time notification of collaborate more effectively and gain productivity through automation of everyday programming tasks, and support for advanced concepts such as code reuse and parallel development.

“Integrity was distinctive from all others in two significant ways. First, it offered very effective support for remote development teams through its Federated Server Architecture, and second, it offered the unique concept of change packages, allowing us to directly tie together a development issue with all related artifacts, including source code.”

Benny Chang, Vice President of Engineering, Tundra Semiconductor Inc.
Features and Benefits

- A hierarchical project structure organizes source code logically and applies SCM best practices.
- Sandbox environments allow developers to create a private workspace to explore changes, or update code without impacting master project files.
- Modern and reliable Federated Server™ architecture eliminates the need for replication, reduces administration costs and enables real-time geographically distributed development over high latency, low bandwidth networks.
- Task-based development via change packages and staged change package review allows developers to intuitively manage change at a task level, and subject that change to management or peer review prior to committing to the repository.
- Sophisticated project sharing and refactoring support facilitates parallel development, code sharing and reuse of software components and requirements, lowering administration costs and reducing the need for costly rewrites.
- Development teams can work flexibly and collaborate with a streamlined locking model that supports optimistic locking; non-exclusive locking and exclusive locking of files.
- A graphical history view provides visibility into a project's paths and branches.
- Integrate process management and workflow, requirements visibility, and metrics and measurement capabilities throughout your daily development activities through Integrity’s process and workflow, requirements management, release management and portfolios capabilities.
Easily integrate configuration management capabilities into existing tools and systems with an Open API.

Seamless access to all configuration management abilities directly from within leading development environments including Eclipse, IBM WebSphere and Microsoft .NET.

Streamline conflict resolution and improve application quality through 3-way differencing and merging, automatic branching and merging and graphical drag and drop merge.

Facilitate real-time team collaboration with automatic project change notification.

Baseline an entire project or set of requirements at any point in time and freeze completed modules, projects, requirement documents or other sets of lifecycle artifacts.

Recreate an exact replica of a past version through rollback. Integrity also provides:

- Java application management, including applets, JSP, Java.
- Web component management, including HTML, XML, ASP, GIF, JPEG, CGI, JavaScript.
- Client/Server application management, including C, C++, Visual Basic, PowerBuilder.
- Database schema management, including SQL scripts.