



Rational software

IBM Rational Build Forge

Highlights

- ***Increase team efficiency with centralized build and release management—using the tools you have in place today***
- ***Accelerate build and release cycles through iterative development, parallel processes and efficient use of hardware***
- ***Improve product quality through consistent, repeatable processes and early detection and troubleshooting of errors***
- ***Enhance visibility with consolidated release information and advanced reporting to enable better decision making***
- ***Simplify compliance management with self-documenting audit trails and role-based security***
- ***Empower developers by providing self-service access to preconfigured build processes from within their integrated development environments***
- ***Enable global teams with Web-based access, user authentication and Unicode support for multibyte content***

Provide reliable, high-performance enterprisewide builds throughout the software delivery lifecycle

IBM Rational® Build Forge® software automates complex build and release processes to take software and systems development to new levels of automation, efficiency and quality. Through an adaptive framework, Rational Build Forge software helps development teams standardize and automate repetitive tasks, optimize hardware resources and connect disparate development tools to increase staff productivity, compress development cycles and deliver better software, fast.

Rational Build Forge software also provides advanced reporting capabilities for better project visibility and insight, so teams can improve their build and release processes over time. Through consistent tracking and documentation, the Rational Build Forge application can deliver ongoing audit trails for compliance management without manual effort. And with support for distributed, mainframe and midrange platforms, Rational Build Forge software provides a centralized solution that can coordinate and execute repeatable build and release processes across the entire enterprise.

Eliminate the chaos of unmanaged and homegrown build environments

Rational Build Forge software provides centralized access and control of your build and release processes. Repetitive tasks can be automated, standardized and reused across projects to help ensure process consistency and reduce new-project setup times. Team handoffs and documentation occur automatically, which helps you bridge silos of information and retain critical process knowledge. And with multiple scheduling options, you can execute builds at a specific date and time or can execute builds perpetually based on source file changes for continuous integration and agile development.

Compatible with existing build scripts, batch files, development tools and other processes, the software has no new proprietary scripting languages to learn and no throwaway work. Out-of-the box adaptors integrate with leading source control, testing and defect tracking products for rapid implementation. The IBM Rational Build Forge Adaptor Toolkit allows for customizable integration with proprietary and third-party development tools

for additional flexibility, automation and data sharing. By easily integrating with your current environment, Rational Build Forge software enables you to leverage existing investments and get up and running quickly.

Speed release cycles

Rational Build Forge software reduces build-related delays and helps speed build cycles. Diverse build tasks are executed automatically, so there are no time gaps due to manual intervention. Using threading, independent processes can run simultaneously for fast processing and increased performance. And builds can be resumed at a failed step rather than restarted at the beginning.

Dynamic pooling helps optimize your hardware environment. Servers that were previously dedicated to a single project become highly productive shared server pools. The configurations and capabilities of each server in the pool are detected automatically to provide support for dynamic server selection and load balancing. Build activities can then be distributed automatically across machines, further accelerating build times. This same pooling capability enables fault tolerance, so build steps automatically are redirected to an available server if a machine goes down.

Accelerate troubleshooting and improve quality

Rational Build Forge software monitors and logs build and release tasks step by step. When a problem occurs, an e-mail automatically notifies the responsible developer and links him or her to the location where the error occurred. Developers can then view and troubleshoot build issues themselves. And custom filters can be configured to detect language- or application-specific conditions, allowing defects and other build errors to be identified and resolved quickly.

Empower developers with self-service capabilities right from their IDE

Direct access to build and release management functions is provided from within leading integrated development environments (IDEs), including IBM Rational Application Developer, Microsoft® Visual Studio® 2005 and the Eclipse framework. This enables developers to preview local file changes in a staged build environment—without leaving their preferred tools. This pre-flight build feature means developers can test the code they've been working on using a separate preconfigured build environment to catch potential errors before they check in to source control. And because the environment is managed by role-based security, developers see only the projects and

steps for which they are authorized—keeping build scripts, servers and projects intact.

Improve visibility and decision support

IBM Rational Build Forge software collects valuable build information and generates intuitive reports to help your team uncover development bottlenecks, determine trends for specific projects and pinpoint areas where performance can be tuned. Numerous reports are provided out of the box for fast analysis and insight. A detailed historical record about each build is maintained. And a delta report shows details of previous builds and provides performance confidence indicators for how a build will run in the future.

IBM Rational Build Forge Quick Report is an advanced reporting tool that offers exceptional ease of use and flexibility. A zero-footprint Web client allows users to quickly create, modify and run ad hoc custom reports on the Rational Build Forge repository. A point-and-click wizard interface and predefined report types make reporting on metrics and data easy for all stakeholders. No structured query language (SQL) expertise, API skills or manual scripting efforts are required to get the information you need, when you need it.

IBM Rational Build Forge software edition comparison

Feature	IBM Rational Build Forge Standard Edition	IBM Rational Build Forge Enterprise Edition
Automated process for build and release management	■	■
Distributed multiplatform builds and build acceleration	■	■
Web console for user access and administration	■	■
Detailed audit logging and bill-of-materials report	■	■
Scheduled, as-needed and continuous integration builds	■	■
Robust permissions and security model	■	■
Integration with third-party tools and technologies	■	■
Notifications via e-mail or Really Simple Syndication (RSS) data feeds	■	■
Sophisticated log file filtering and searching	■	■
IDE integration	■	■
Choice of database repository	■	■
Application programming interface (API)		■
Dynamic server management		■
Scalable to large teams		■

Simplify compliance management

Rational Build Forge software tracks and stores comprehensive data on builds, releases and related tasks to provide a detailed bill of materials that documents the contents of each release for better reproducibility and compliance management. Integration with source control, defect tracking and testing tools creates a one-stop view that allows teams to correlate source changes, test results and

defect data with build and server configuration information. Role-based security manages and controls user access, and notifications and alerts inform you if someone steps outside your IT controls. Rational Build Forge software also provides a documented audit trail of release contents, process changes and user access to the system, so teams don't have to gather information manually.

Enable global teams

Rational Build Forge software helps keep global teams in sync. The Web-based management console provides a consolidated, real-time view of each project, so everyone stays on the same page. It can integrate with your existing tools so teams can share common processes, even if they're using different technologies across different sites. By sharing processes and information, the software makes handoffs smooth and fast.

Support for lightweight directory access protocol (LDAP) authentication can provide safe and secure access, without the need to store passwords locally. Comprehensive Unicode support gives you the flexibility to save and execute build content for multibyte character sets. In addition, Rational Build Forge software supports your platform of choice, including distributed, mainframe and midrange platforms, giving you the flexibility to support the environments you need, enterprise wide.

For more information

To learn more about how IBM Rational Build Forge software can help you automate and accelerate your build and release processes, visit:

ibm.com/software/awdtools/buildforge



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