Unifying Code and Content for Web Development

Rational Suite ContentStudio

As Web sites grow in size and complexity, you need to look for ways to automate your Web development processes. Time to market is critical, and is frequently a top priority. To stay ahead, your Web team must be able to move quickly and efficiently and deploy high quality e-business applications on time and on budget.

Accelerate the Web Development Process

Rational Suite ContentStudio™ is an end-to-end solution that unifies your extended Web team and accelerates your development cycles. Rational Suite ContentStudio manages Web code and content through a suite of innovative, team-unifying tools and technologies developed by Rational® Software. Through this integrated suite, Web teams can leverage scalable, common processes and tools to build high-quality internal and external Web applications at Internet speeds.
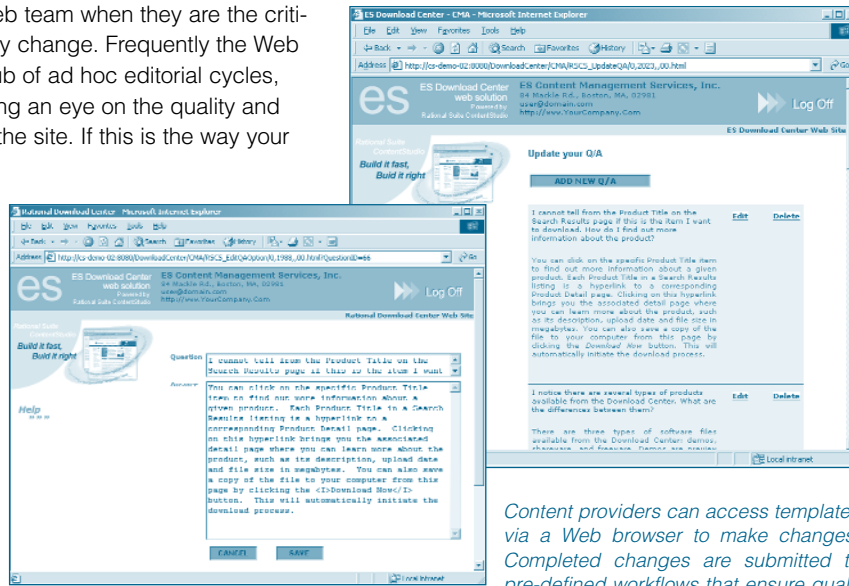
Control the Chaos with Distributed Authoring

As your site grows, so does the volume of content and the number of content providers. Often, this results in serious bottlenecks for the Web team when they are the critical path for every change. Frequently the Web team is at the hub of ad hoc editorial cycles, instead of keeping an eye on the quality and performance of the site. If this is the way your

sites are updated, you have a traditional serial change process that allows one change at a time. Without a better process in place, this bottleneck will hamper productivity and frustrate your team. Rational Suite ContentStudio offers a solution that shatters the Web bottleneck and facilitates a parallel change process. When distributed authoring is combined with flexible workflow, any number of changes can be worked on simultaneously without any Web team involvement.

Distributed authoring allows content contributors an easy and efficient way to add and update content while safeguarding the look and feel of the site. Contributors are empowered to make changes through secure applications which they can access through a standard Web browser. Contributor applications clearly separate the design elements of the site from the text and editable portions. Contributors can edit and submit their changes for approval via an automated workflow cycle, which circulates the proposed changes to authorized reviewers for approval or edits. Once this cycle is complete, the changes can be automatically posted to the site. This reduces the need for the Web team to be involved in every site change.
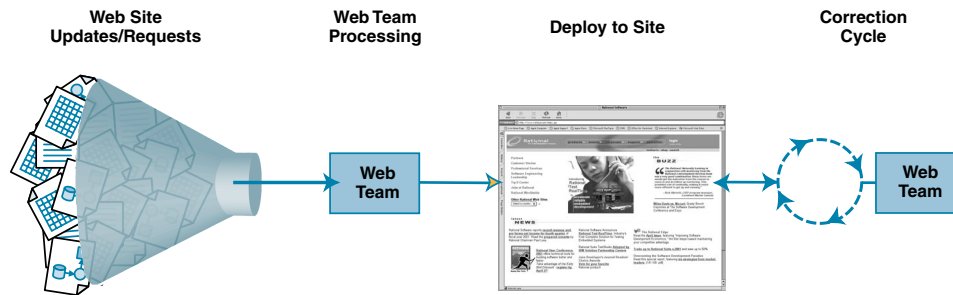

Content providers can access templates via a Web browser to make changes. Completed changes are submitted to pre-defined workflows that ensure quality and accuracy before being deployed.
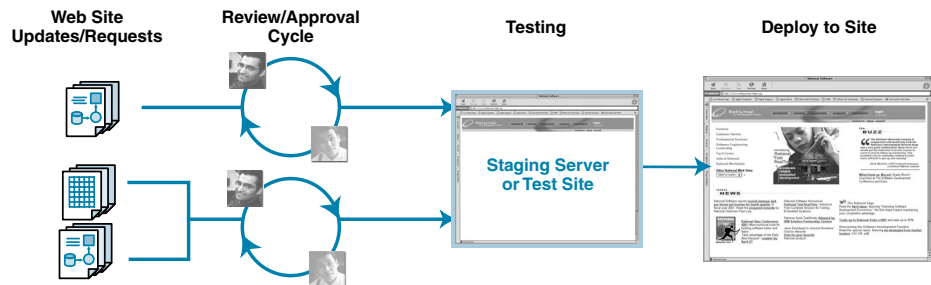
"I did more with Rational Suite ContentStudio in 3 days than I did in 3 months with a different product."

Chris Walters,
Noblestar

Rational®
the software development company

Unifying Code and Content for Web Development

BEFORE: Web Bottlenecks Slow Productivity

Web Site Updates/Requests	Web Team Processing	Deploy to Site	Correction Cycle

AFTER: Automated Workflow Accelerates Change and Reduces Web Team Involvement

Web Site Updates/Requests	Review/Approval Cycle	Testing	Deploy to Site

Staging Server or Test Site

Workflow and Managing Change

Maintaining a site that has the most up-to-date content is essential. Yet often changes to site content are complicated by the fact that multiple people are required to write, edit, and approve content prior to release. Rational Suite ContentStudio addresses these inefficiencies through a flexible workflow management system that helps your team coordinate code and content change activities between multiple stakeholders. It includes task, review and approval workflows. A task workflow coordinates site updates, while a review and approval workflow tracks the approval chain needed to ensure quality.

Because of the integrated workflow process, project managers can easily track tasks and compile high-level progress reports about change requests. And your team can easily see specific tasks and priorities.

Unify the Web Team

Operating external or internal Web sites requires contributions from large numbers of people. At the heart of these operations is a Web team and a supporting cast that includes engineers, designers, editors and production staff. In addition, there is an extended team that typically encompasses content contributors from areas like product management, marketing, legal review, public relations and executive management, who generate thousands of pages of text and graphic content that change frequently.

For the Web team, unifying the activities of everyone who contributes to the site can be overwhelming. This is especially true in organizations that have no formal process for managing the development, review, staging and deployment of site artifacts. With Rational Suite ContentStudio all Web assets are not only versioned individually, but in relationship to one another, in a common repository.

Rational Suite ContentStudio unifies the Web development activities by delivering a set of integrated tools optimized for every member of the team — from content contributors and analysts to developers and testers.

Like every Rational Suite®, Rational Suite ContentStudio provides the Rational Unified

Process® - a proven framework for applying software development best practices, requirements and change requests in an integrated team unifying platform. This enables cross-functional teams to efficiently collaborate and manage change across the development lifecycle with tools that maximize team productivity.

Deploy Quickly and Confidently

Rational Suite ContentStudio features integrated deployment functions that enable your team to always have at their fingertips all the right versions of the right files. No longer do you have to manually identify, select and copy the files you need for deployment. Since Rational Suite ContentStudio can associate complementary files, and knows the file versions that require updating, only the correct artifacts will be automatically deployed to the appropriate location.
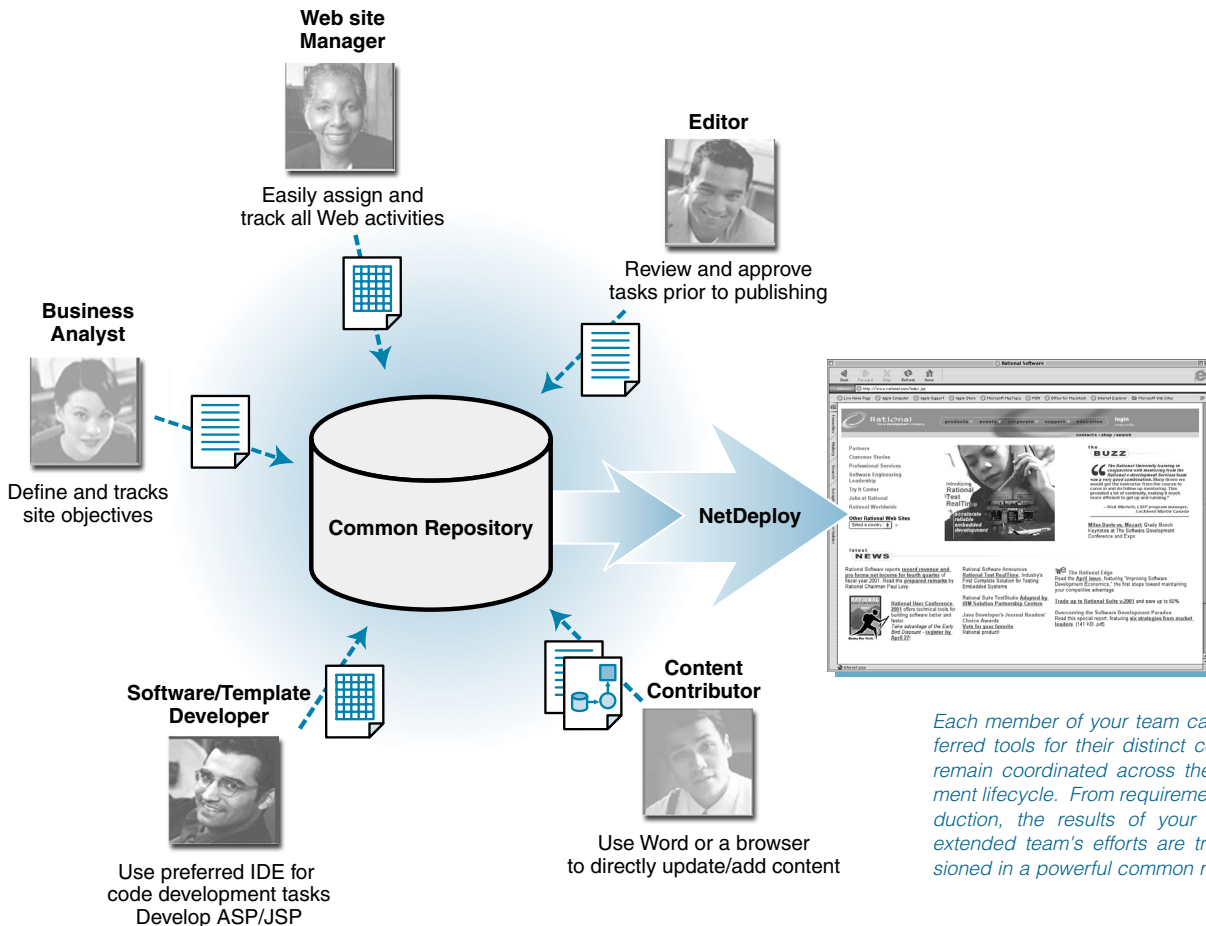
NetDeploy, Rational's integrated deployment tool, also automates deployment with scheduling features. This means that content and appli-

cations can be synchronized and deployed at designated times or on a recurring schedule. You also have the option to determine when to expire content on your site. This is particularly important when you have time-sensitive promotions, communications or events on your site.

Scheduling deployments also means you don't have to bother coming to work over the weekend to make major site updates any longer. Just finalize all your changes, test them in advance, and schedule the hour and date of your deployment. It's that simple.

If you have daily updates to portions of your site, schedule recurring updates. NetDeploy will pull any changed files from a cue and deploy them routinely.
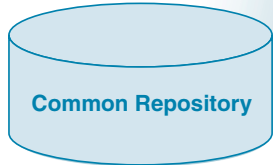
NetDeploy includes trigger support for user-defined processing, to support activities such as configuring your applications server or syncronizing content deployments. These triggers enable you to completely customize deployment tasks with such features as registering new objects on a target server or sending email
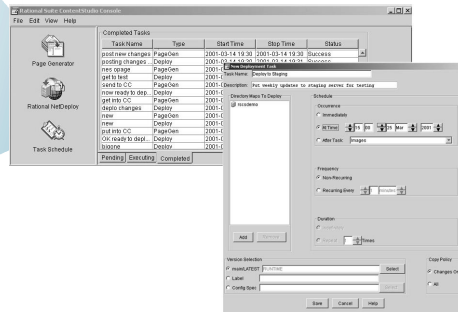
Web site Manager

Easily assign and track all Web activities

Editor

Review and approve tasks prior to publishing

Business Analyst

Define and tracks site objectives

Common Repository

NetDeploy

Software/Template Developer

Use preferred IDE for code development tasks Develop ASP/JSP

Content Contributor

Use Word or a browser to directly update/add content

Each member of your team can use their preferred tools for their distinct contributions, yet remain coordinated across the Web development lifecycle. From requirements through production, the results of your immediate and extended team's efforts are tracked and versioned in a powerful common repository.

Common Repository
- *Securely versions all site artifacts*
- *Allows open file system views in Windows Explorer*
- *Provides audit trail*
- *Enables easy rollback*

Rapid Deployment
- *NetDeploy Agent allows for easy deployment through firewalls*
- *Multiple-server deployment can be done quickly and easily*

cart.dll	1	- (2)	- 3	- 4	
index.html	1	- 2	- 3	- (4)	
product.html	1	- 2	- (3)	- 4	
product2.html	1	- (2)	- 3	- 4	
process.dll	1	- (2)	- 3	- 4	

Common Repository

Firewall

To Production

Net Deploy Agent

Multiple Servers

Deployment is made easy to a local server or one outside of a firewall. With Rational Suite ContentStudio, a NetDeploy agent resides on a server as friendly receptor to all deployments files. It recognizes the protocols and receives the updates.

To Testing

NetDeploy
- *Schedule deployment*
- *Automate deployment tasks*
- *Deploy related artifacts together (e.g. code and content)*
- *Uses triggers to customize tasks*

Net Deploy Agent

Web Server

notifications after tasks complete. The triggers can be Windows or UNIX commands, shell scripts, or executable programs.

You can also use Rational Suite ContentStudio to manage and version both your dynamic and static pages and related content. Your content records can be stored in XML format in a common repository making it easy to match content and application interests to the needs of the visitor to the website.

Integrate Code and Content

The success of today's sites depend both on the effective management of the front-end content seen by users and the back-end code that enables powerful and compelling business applications. Rational Suite ContentStudio makes this critcal synchronization of Web assets possible. Also common deployment capability for code and content ensures site

integrity. Using a common repository, revision histories of all artifacts — whether code or content — are maintained. This allows full traceability, including an audit trail and secure versioning that ensure high-quality, synchronized releases and updates. It also offers a reliable, parallel development infrastructure that accelerates development cycles by enabling multiple developers to work on artifacts simultaneously and share code when required.

Rational Suite ContentStudio not only provides versioning of templates and files, but also database content records. Content records, and their associated metadata, are versioned in the common repository in XML format. This content is then available for deployment to your production databases and servers.   Content versioning also provides you with powerful auditability and content rollback capabilities.

Unifying Code and Content for Web Development

Powerful Open Templating Solutions

Rational Suite ContentStudio provides a rich and open templating solution for your team developers. Whether they are comfortable with working in Java Server Pages (JSP) or Microsoft Active Server Pages (ASP) templating environments, ContentStudio supports them all. These templates are used to provide a consistent look and feel for your Website to ensure corporate standards are maintained. Unlike rigidly structured templating solutions, JSP or ASP provide the most powerful flexible and open solution so you can customize the Website to meet your most demanding requirements

A Foundation for Development Success: The Rational Suite Team Unifying Platform

Because site development is a team sport, every Rational Suite features the Rational Suite Team Unifying Platform. More than a collection of disparate tools, this open, integrated platform speeds development at every stage of the software lifecycle.

One Team, One Platform

The Rational Suite Team Unifying Platform breaks down the artificial barriers that too often separate cross-functional teams. Now your entire team can share access to common requirements information, process guidance, defect and change request data, test results, and up-to-the-minute project metrics. It's never been easier to access critical project data, share information, or improve the visibility of your project to all stakeholders.

Streamline Everyday Activities

With Rational Suite, you get more than easy access to project data. You also get unprecedented automation that speeds everyday tasks. Easily transform requirements into test cases - and automatically verify that the functionality you are building meets user needs. Append test results to bug reports - and save hours of time trying to recreate user errors. Analyze trends based on actual software artifacts - and make projections with confidence. Lifecycle integration lets you spend more time on critical development activities, and less time on tedious and time-consuming administration.

An Open and Extensible Foundation

Best of all, the Rational Development Platform is open, extensible, and supported by over 600 development and system integration partners. The Rational platform supports both Windows and UNIX operating systems and is closely integrated with leading programming environments. We work closely with strategic partners IBM, Microsoft, Sun, and others to ensure broad compatibility with .NET, J2EE, and embedded system environments, extending your development and deployment options. An open API (Application Program Interface) ensures maximum flexibility now and in the future.

The Rational Developer Network

With so much information available on the Web, how do you get to the right information at the right time? Are you spending more time searching than solving? Rational can help. Available exclusively to Rational Suite users, the Rational Developer Network is your one-stop resource for white papers, articles, artifacts, book reviews, topical discussions, and more. Organized by expert editors and arranged by process and technology topics relevant to the worldwide community of Rational Suite users, Rational Developer Network delivers the information you need to succeed.

Integration with Rational Products

Rational Suite ContentStudio integrates seamlessly with a host of Rational products to create an automated full lifecycle solution. These products are designed to support every function of an internal or external Web team, including project management, system definition, software development, content management, system testing, and deployment.

More Rational Suite Solutions

- Rational Suite® AnalystStudio® – a complete requirements management, system definition and data modeling solution

- Rational Suite® TestStudio® – comprehensive functionality, reliability, and performance testing

- Rational Suite® DevelopmentStudio – an integrated diagnostic, unit testing and model-driven development solution. Available in Windows, UNIX and Real-Time/Embedded systems editions.

- Rational Suite® Enterprise – Includes all tools in Rational Suite AnalystStudio, DevelopmentStudio, and TestStudio.

Accelerate Success with Rational Development Services

Turn to Rational Development Services to bring your projects in on time and under budget. Our service offerings accelerate success through training and mentoring programs, consulting services, and technical support. An investment in services pays off immediately through faster technology deployment and accelerated project delivery. Long term, our services raise the skill level of your entire project team, laying the foundation for continuous productivity improvement.

Service offerings include:

- Rational University, our professional training organization, offers more than 60 courses spanning the software life cycle. Courses are available on site or at dozens of classrooms worldwide.

- Consulting and mentoring support, with a focus on knowledge transfer of tools and best practices

- Project or Technology Assessment packages that provide an independent assessment of your organization's capabilities.

- QuickStart and Deployment Packages, combining installation, training, and consulting, offer a proven path to efficient technology adoption

- Convenient Hotline Access for speedy resolution of tool and technology issues that could delay progress.

SPECIFICATIONS

Supported Web Browsers
- IE 4.x or later, Netscape 4.x or later

Supported Clients
- Windows 98 SE/ME
- NT Server/Workstation 4.0
- Windows 2000 Server/Professional

Supported Servers
- Windows NT 4.0
- Windows 2000 Server/ Advanced Server

Supported Authoring Tools
- All popular authoring tools including Microsoft Office, Allaire Homesite, Macromedia Dreamweaver and others

Support Development Tools
- All popular IDE's including Microsoft Visual Studio, IBM VisualAge for Java and others

Supported Databases
- Microsoft SQL Server
- Oracle 8/8i

Server Hardware
- Minimum requirements: 256 MB RAM, 450MHz processor

Deployment Servers supported
- On NT Server 4.0, Sun Solaris, Windows 2000 Server/Advanced Server
  - IBM WebSphere Advanced, Version 3.5.2
  - BEA WebLogic, Version 6.0
- IIS 4.0/Tomcat 3.2.1 (NT 4.0)
- IIS 5.0/Tomcat 3.2.1 (Win 2000 Server/AS)
- Apache 1.3/Tomcat 3.2.1 (Win 2000 Server/AS and Solaris)
- HP-UX11
- AIX 4.3.3

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