IBM

Rational software

IBM® Rational Suite® TestStudio®

Highlights

■ *Manages manual testing and reporting*

■ *Supports multiple IDEs:*
Microsoft Visual Studio.NET
Oracle Developer/2000
Delphi
PeopleSoft
PowerBuilder

■ *Supports multiple languages:*
ActiveX
Java, JavaScript
HTML, DHTML, XML
Visual Basic
Visual C++

■ *Manages manual and automated testing*

■ *Performs functional, performance, and reliability testing*

■ *Tests all .NET native controls, including VB.NET, C#, J#, Managed C++*

■ *Enables test asset reuse*

■ *Maps business requirements changes to test cases*

■ *Gives testers built-in testing guidance*

The role of testers has never been more difficult, because companies and organizations are trying to bring high-quality applications to completion faster and more cost-effectively than ever before. Add to that the facts that for many projects, virtually all testers tasks are still handled manually, that testing and the larger project team don't work closely enough to expedite each others' work, and that it is often difficult for testers to stop long to learn new skills.

IBM® Rational Suite® TestStudio® V2003 alleviates these pressures by:

• Providing a means to incorporate or expand the use of test automation with one product
• Freeing test teams from time-consuming but important manual tasks like tracking requirements changes and communicating defects to developers, so they can use the time saved to focus on finding more defects
• Building testers' skills on-the-job with IBM Rational Unified Process® mentors, training and the online testing center only available to Rational customers.

Ease into Test Automation

IBM Rational Suite TestStudio helps you achieve the many tangible benefits of test automation by enabling you to intelligently and gradually move from a manual testing environment to a test automation process.

Rational Suite TestStudio provides the only test management tool that automates administration of manual testing, IBM Rational TestManager V2003, so that you can get started in automation from the perspective of your existing testing.

Automate Management of Manual Testing

IBM Rational Suite TestStudio V2003 includes IBM Rational TestManager V2003, which automates the administrative aspects of manual testing.

You can:
• Create a test plan that organizes the manual testing workflow
• Log the steps and results of executing manual scripts as they are performed
• Generate automated reports of manual test results and metrics

Add Automation in Stages

IBM Rational Suite TestStudio is a full spectrum testing tool that you can use to add automate gradually or all at once. Increase your use of automation to defect tracking, regression testing, requirements management, and functional and load testing — as they fit logically for your project.

Find More Bugs

IBM Rational Suite TestStudio integrates automated functional, performance, reliability, and regression testing with requirements management, defect tracking, version control, runtime analysis and centralized test management.

That integration gives testers more time and more testing power. Testers gain the time to create well thought-out test cases that truly exercise the application. And they get the power to extend the breadth and depth of their testing without a lot of additional work. Automated testing uses computers for what they were intended: to handle the mundane so that people can put their minds to the real issues.

Functional Testing

IBM Rational Suite TestStudio enables you to create, modify, and run automated functional, regression, and smoke tests for applications built using a variety of integrated development environments and languages. The languages and environments include: Java, HTML and DHTML, Visual Basic, C#, C++, Microsoft .NET, Oracle, Delphi, PeopleSoft, and PowerBuilder.

Performance Testing

IBM Rational Suite TestStudio automates the multiple types of load testing needed to assure your application's performance in HTTP/HTTPS protocols. Rational Suite TestStudio is used to:

- Ramp up the number of users against response-time requirements to determine the application's limit.
- Stress the application's environment to find any weak points, such as a saturated CPU
- Run the load tests on widely varied configurations
- Test to see if system resources are in contention with each other when multiple users want the same data

Rational Suite TestStudio enables you to quickly build complex usage scenarios to emulate user group activities and create workload schedules for applications using the HTTP protocol. By weighting the various user groups in your schedule, you can produce a realistic system load. Once the workload is created, you can scale your load test from a few to many users, without creating a new schedule for each user count. You can also precisely control transaction rate pacing by specifying how many and what types of transactions are submitted by your virtual user population in a given amount of time. Performance testing requires additional virtual testers, available separately.

Integrated Functional and Performance Tests

IBM Rational Suite TestStudio is designed to integrate functional testing with load testing. This enables you to easily scale a load on the back-end server while simultaneously, and from the same schedule, executing functionality tests against your client.

Instrumented Regression Testing for Reliability

IBM Rational Suite TestStudio accelerates and simplifies regression testing by identifying which functional test scripts are affected by developer code changes. This allows testers to quickly find, and run, the smallest set of scripts needed to fully test any modifications made by developers. Rational Suite TestStudio delivers an unparalleled level of reliability and regression testing with point-and-click ease.

Managing Changing Requirements

IBM Rational Suite TestStudio makes functional testing against changing requirements simple, repeatable and effective. Built-in integration between requirements tracking and test management gives testers visibility into the software's requirements from the planning stages to the end of development.

As requirements for functionality and features change, potentially impacted test cases are automatically flagged, telling testers to check them. The tester no longer has to rely on communication from developers or analysts about changes and no longer has to trace the changes through to relevant tests. Rational Suite TestStudio does it for them. The tester can spend time testing the changes, rather than looking for them.

Defect Tracking and Version Control

IBM Rational Suite TestStudio offers a powerful and highly flexible defect and change tracking system that captures, tracks, and manages all types of change requests and allows you to apply version control to test scripts. With Rational Suite TestStudio you can track defects and enhancement requests, assign work activities, and assess the real status of projects throughout the development lifecycle.

Manage All Types of Testing

IBM Rational TestManager, part of IBM Rational Suite TestStudio, is an open, extensible test environment that allows you to manage, organize and execute all testing activities from a central place. Rational TestManager acts as the tester's working desktop. It is the place where the potential impact of changes is automatically flagged in test cases, and where the entire team goes for data and metrics on the quality state of the system at any given point during the project's lifecycle.

Team Communication

Developers, analysts and project leads can get a 24X7 assessment of the project's defect status by using IBM Rational TestManager to view reports, defect logs and test cases built to test requirements and their changes.

IBM Rational Suite TestStudio makes it easy for developers to reproduce the bugs testers find because of the integration of runtime analysis, functional testing and defect tracking. A developer opens the defect report, clicks on a defect's log, opens the test from within the log, sees exactly what happened, checks the code-coverage for the test – and can then easily reproduce the bug. Expediting team communication is one of the time-saving benefits of test automation.

Become a Better Tester

With IBM Rational Suite TestStudio you receive practical support and guidance that you can use immediately to become a better tester.

The IBM Rational Unified Process® is a browser-based information tool that comes with Rational Suite TestStudio. It provides extended, context sensitive help on effective test processes, and includes tool mentors that provide

detailed guidance on how to effectively use Rational tools.

Rational provides a rich resource of testing articles, plug-ins and white papers from testing industry thought-leaders at their fingertips via the online IBM Rational Developer Network℠. RDN provides self-paced enrichment on automating testing, trends and test issues. RDN is available to all IBM Rational Suite customers.

In addition, IBM Rational University provides both online and instructor-led testing courses; and Rational offers free online Webinars on testing topics of interest and instructor-led seminars on new Rational testing technologies.

**Accelerate Success with
IBM Rational Services**
Like all IBM Rational tools, IBM Rational Suite TestStudio is supported by a worldwide services organization that combines extensive online resources with personalized training, consulting, and technical support.

- IBM Rational Developer Network helps you learn and use Rational tools and methodologies through online access to training, articles, whitepapers, documentation, scripts, discussion forums, and more.
- IBM Rational University courses are available over the Web, on-site at your organization, or at dozens of classroom locations worldwide.
- Professional Services, including Assessments, QuickStarts, Deployment, and Custom Consulting and Mentoring Services, offer proven pathways to efficient technology adoption.
- Technical Support provides efficient problem resolution and up-to-date access to IBM Rational's latest software releases.

**A Team-Liberating Foundation:
The IBM Rational Suite
Team Unifying Platform**
IBM Rational Suite Team Unifying Platform forms the foundation of every IBM Rational Suite edition. This essential toolset provides common access to requirements, process guidance, defect and change request data, test results, and up-to-the-

minute project metrics. The results: increased productivity and reduced project risk.

The Rational Suite Team Unifying Platform includes these essential team tools:

Project Management
- IBM Rational Unified Process – a configurable software development process platform.
- IBM Rational RequisitePro® - team-based requirements management.
- IBM Rational TestManager - team access to test plans and results.
- IBM Rational ProjectConsole / IBM Rational SoDA - metrics and reporting within a customizable project Web site.

Software Configuration Management
- IBM Rational ClearQuest®- flexible defect and change tracking.
- IBM Rational ClearCase® LT – the market-leading solution for version control and more.

IBM®

SPECIFICATIONS

Hardware
- *Pentium 500 MHz or higher*
- *CD-ROM drive*

Memory and Disk Space
- *256 MB RAM or higher*
- *1.3 GB diskspace*

Operating Systems
- *Windows NT, ME, XP, 2000*

Browser Support
- *Netscape Navigator*
- *Microsoft Internet Explorer*

Requires Crystal Reports™ for report generation

e business software