

IBM Rational System Testing Family

Highlights

- **Automates functional and performance testing and test management**
- **Enables gradual adoption of test automation**
- **Maps requirements changes directly to test cases**
- **Enables functional testing from within IBM WebSphere Studio**
- **Creates test scripts in Java**
- **Provides ScriptAssure for resilient, robust scripting**
- **Gives testers built-in guidance and access to testing enrichment**

The role of quality professionals in software development has never been more difficult—or more crucial—because organizations are trying to complete application development faster and more cost-effectively than ever before. Test teams who use manual testing exclusively are struggling to keep up, can't test all the code, risk missing significant defects, and can't stop long enough to learn new skills.

IBM Rational automated testing tools help test teams gradually adopt automation, find more defects in less time and improve testing skills on-the-job. Rational system testing tools:

- *Provide the means to gradually introduce automation*
- *Transform the test plan into the guide for all daily work*
- *Automatically track requirements' changes and communicate defects to developers*
- *Enable testers to expand test coverage and depth without adding time to the schedule*
- *Build testers' skills on-the-job*

The Products

The Rational system testing family includes:

- *IBM Rational Functional Tester for Java and Web*
- *IBM Rational Robot*
- *IBM Rational Performance Tester*
- *IBM Rational Team Unifying Platform*
- *All ship with IBM Rational TestManager*

Ease into Test Automation

By using IBM Rational TestManager for manual test administration and then adding IBM Rational Robot for regression testing, a team can gradually move toward the benefits of test automation.

With Rational TestManager 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*

**IBM Rational Robot
wins
Yphise Award**

IBM Rational® Robot was named the Best Functional Test Automation Tool for 2002 – 2003 by Yphise, a leading analyst firm providing independent assessments of software products.

Chad Mason, Manager of Test Automation for Choice Hotels International, reports,

“With IBM Rational Robot, it is much easier to get someone up and running than with other functional testing tools. The Basic-based language is much more intuitive – whether someone has programming language experience or not. That alone allowed us to jump-start and save time.”

Choice Hotels International, which franchises more than 5,000 hotels, inns, and resorts around the world, estimates that since they began using Rational testing tools, they have saved close to \$1 million through increased application and Web availability as a result of higher quality releases.

Next, testers who are new to automation can readily adopt IBM Rational Robot for regression testing.

With IBM Rational Robot, you can:

- *Improve the scope and frequency of regression testing*
- *Plan, track, and execute the regression testing through Rational TestManager*
- *Advance to functional testing using the same tool*
- *Extend test scripts to further improve test coverage and depth*

The Rational system testing family includes the IBM Rational Team Unifying Platform, a set of integrated capabilities that automate defect tracking, requirements management, and centralized management of all types of testing. The Rational Unified Process, which provides build in guidance on the testing process itself, is included.

Uncover More Defects

Each of the IBM Rational functional and performance testing tools, when used with the team-unifying tools, make it possible to uncover more failures, earlier in development, when problems are less expensive and less time-consuming to fix.

IBM Rational Functional Tester for Java and Web

IBM Rational Functional Tester for Java and web is an advanced functional and regression testing tool used to test applications built with J2EE, J2SE, HTML, DHTML, XML, JavaScript and Java Applets.

- *Includes ScriptAssure™, which produces resilient, reusable test scripts and validates the interactive data an application generates, minimizing script maintenance.*
- *Creates verification points for dynamically changing data by allowing testers to set the range of acceptable responses.*
- *Creates test scripts in Java, bringing all the advantages and strengths of an industry-standard language to testing, including improved tester-developer collaboration.*
- *Tests from within a perspective of IBM WebSphere Studio and IBM Rational Rose XDE Developer.*
- *Plays back tests recorded on Microsoft Windows on Red Hat Linux without modification, enabling you to easily validate*

application functionality on multiple platforms.

- *Provides object mapping. Testers use a central object repository to verify and modify any tested object. Those changes are automatically transmitted to all appropriate test scripts, eliminating the need to build new scripts each time the application is modified.*

IBM Rational Robot

IBM Rational Robot supports, with each license, testing applications built in a wide range of environments and languages, including HTML and DHTML, Microsoft Visual Studio .NET, Microsoft Visual Basic and Visual C++, Java, Oracle Developer/2000, PeopleSoft, and Sybase PowerBuilder.

- *Rational Robot is the only tool that provides full, native support for all .NET controls, including VB.NET, C#, J# and Managed C++. It automates functional, distributed functional and regression tests for applications*

ScriptAssure lets testers weight the sensitivity of test scripts to UI changes, so that the scripts testing the business logic don't break when minor interface details are changed – as when the word 'The' is added in the example shown here.

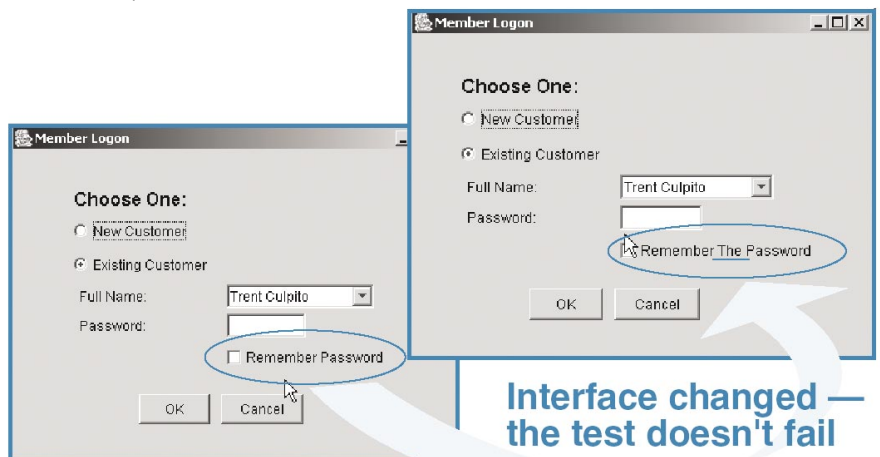
constructed with Microsoft Visual Studio.NET WinForms and WebForms; and simplifies and automates configuration testing of .NET applications.

- *Provides test cases for menus, lists, alphanumeric characters, bitmaps, and many more objects; and tests custom controls and objects under varying conditions.*
- *Ensures testing depth by testing the hundreds of properties of an application's component objects – such as ActiveX Controls, OCXs, Java applets, and many more.*

IBM Rational Performance Tester IBM Rational Performance Tester facilitates every aspect of effective system performance testing: planning, test design, automated and manual creation of performance test suites,

execution against various configurations, reporting and analysis.

- *Verifies that an application meets or exceed its response criteria when tested pre-deployment, in production operating environments and under heavy loads.*
- *Has an advanced scheduler that enables testers to emulate complex user behavior without programming.*
- *Points to the source of performance problems, such as a strained CPU or network issues, and reports them graphically*
- *Enables reuse of functional test scripts in load testing and in production monitoring with IBM Tivoli Monitoring for Transaction Performance.*



- *Scales from a few to thousands of users, called Virtual Testers. Ships with 50 Virtual Testers; additional Virtual Tester packs are available separately.*
- *IBM Rational Performance Tester Extension for SQL, which enables performance testing of relational databases, is available separately.*
- *IBM Rational ClearQuest is a customizable defect and change-tracking tool that automates and simplifies sharing defect information with developers.*
- *IBM Rational ClearCase LT provides version control for all artifacts as they evolve over the course of testing.*

During testing, the Rational Unified Process, part of the Rational Team Unifying Platform, provides extended assistance on the testing workflow itself, helping testers know what to do next. RUP™ also includes tool mentors that provide detailed guidance on how to effectively use the tools in the Rational system testing family.

IBM Rational Team Unifying Platform

The Rational Suite Team Unifying Platform™ integrates with each system testing product:

- *IBM Rational Unified Process is a knowledge base of proven software engineering best practices that guides testers through the test process itself. RUP™ methodology is fast becoming the de facto industry standard process for software development.*
- *IBM Rational RequisitePro is a requirements management tool with analytical capabilities that automatically flags test cases potentially impacted by changes for functional and performance testers.*
- *IBM Rational TestManager is the tester's desktop, providing control, management and reporting of all test activities from a single, central point.*

Become a Better Tester

IBM provides a rich online resource of testing articles, plug-ins, code samples, white papers and more from testing industry thought-leaders via the Rational Domain on developerWorks. The self-paced enrichment on automating testing, trends and test issues includes links to testing training and to Webinars on current topics of interest.



SPECIFICATIONS

Note: Each product in the family has its own specifications, which are available at ibm.com/rational. These are general guidelines; additional host and target platforms are supported by some products.

Hardware

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

Memory and Disk Space

- *256 MB RAM or higher*
- *1.3 GB disk space*

Host Platforms

- *Windows NT 4.0 (Service Pack 6a), Windows XP, or Windows 2000*

Target Platforms

- *Microsoft Windows NT, 2000, XP; Red Hat Linux*

Other Prerequisites

- *Internet connection recommended for license and support services*
- *Supports Netscape Navigator and Microsoft Internet Explorer*

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Software Group
Route 100
Somers, NY 10589
U.S.A.

Printed in the United States of America
01-03
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