

IBM Rational Functional Tester

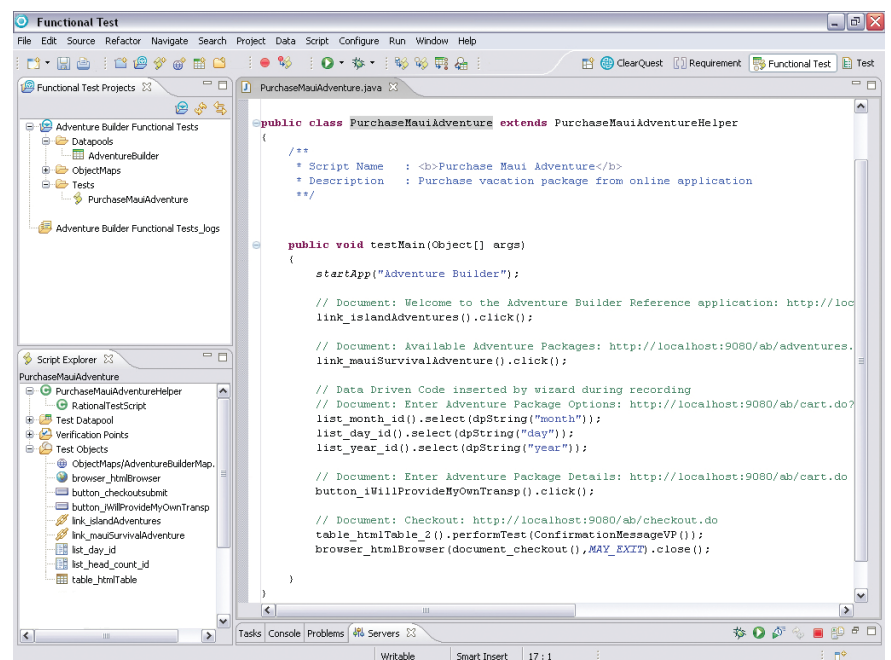
Highlights

- **Provides robust testing support for Java, Web 2.0, SAP, Siebel, terminal-based and Microsoft Visual Studio .NET Windows Forms applications**
- **Uses keywords to bridge the gap between manual and automated testing**
- **Enables you to choose your scripting language for test script customization, editing and debugging**
- **Helps validate dynamic data with multiple verification points and support for regular expression pattern matching**
- **Helps eliminate rework, minimize the rerecording of scripts, and reduce script maintenance**

IBM Rational® Functional Tester software enables you to automate functional and regression testing. Designed with a deep understanding of Java™, Web 2.0, SAP, Siebel, terminal-based, Microsoft® Visual Studio .NET and Microsoft Windows® Forms technologies, Rational Functional Tester software combines a robust recorder of user actions with multiple

customization options and intelligent script maintenance capabilities to help ensure that your test creation and execution process is resilient in the face of application change.

Rational Functional Tester software—accessible to novices and experts alike—is suitable for testers, GUI developers and anyone else on your project team who needs to ensure effective software development.



Testing an application with IBM Rational Functional Tester software

Though functional testing can be performed using a purely manual approach, automation brings great benefits to the process, such as:

- *Enabling regression testing—testing for feature regression from one build to the next—without tying up tester resources.*
- *Freeing quality assurance (QA) departments from maintaining and executing basic tests, encouraging the creation of additional, thorough tests.*
- *Automating nontesting activities such as test lab machine preparation and database configuration.*
- *Reducing human error that can occur during activities such as test step execution and test result recording.*

If you rely on your own application development to serve your needs or your customers' needs, then you know that application quality is a prerequisite for success. However, ensuring that these applications work in a manner that meets or exceeds project expectations requires a level of project discipline and efficiency that can be hard to achieve. Typically the domain of QA departments, functional testing allows users to verify the successful implementation of requirements in categories such as functionality, usability and appearance.

Lower the cost of functional testing

The benefits of automated testing are quickly lost when teams expend great manual effort keeping test scripts up to date throughout the project. Rational Functional Tester software uses IBM ScriptAssure™ advanced technology to learn UI control characteristics, thereby enabling the software to identify the same controls in newer builds despite underlying changes. These characteristics are stored in an object map that can be shared across scripts and projects. With this map, changes to object recognition characteristics affect all test scripts, simplifying maintenance. And new, advanced object map search and filter capabilities in Rational Functional Tester can help make maintenance even easier.

Used to compare actual data with expected data, verification points inserted within test code can support the usage of regular expressions to validate dynamic content such as an ever-changing and ever-increasing order number, or time and date stamps. This capability further helps reduce the need for test maintenance activities to accommodate changes in the application(s) under test.

Build a bridge to automation

Often inefficient and inconsistent, testing can result in much time wasted creating, organizing and managing the most mundane tasks. Keyword testing, a framework for organizing and managing test steps, allows your testers to rapidly create and reuse test scripts as needed. Using Rational Functional Tester software, testers can develop automation scripts that are associated with keywords, and enable easy reuse and improved efficiencies. When testers use these automated scripts in concert with IBM Rational Quality Manager software, they can incrementally adopt automated tests by using keyword testing as a building block to automation. And then your organization can build a collaborative test environment between manual and automated testing tools that can eliminate the friction and gap between manual and automated testing—and leverage the strength of the entire testing team.

Gain virtually unlimited customization potential

Teams quickly learn that test script modification and enhancement are inevitable. Everything from simple looping constructs to advanced file manipulation or operating system interaction may be necessary to get the most out of an automated testing tool. Rational Functional Tester offers you an unprecedented choice in recognition of this need—the choice of mainstream, industrial-strength languages hosted within equivalently robust test editors and debuggers.

Rational Functional Tester software can produce test scripts using either 100 percent Java code hosted within the Eclipse Java Developer Toolkit editor, or using 100 percent Microsoft Visual Basic .NET code hosted within the Microsoft Visual Studio .NET editor. Anyone familiar with these programming languages can quickly modify existing code, as well as create custom libraries that can be called by other test scripts. Coding is greatly simplified thanks to the Eclipse and Visual Studio .NET editors, both of which provide advanced editing features such

as automated code completion and advanced debugging options. Customization possibilities are virtually limitless, and communication of test scripts with development is vastly simplified. In fact, GUI developers and other members of your development team can access Rational Functional Tester software from within their Eclipse or Visual Studio .NET code-based integrated development environments (IDEs) to create their own tests.

Take advantage of open standards

The Java scripting capabilities of Rational Functional Tester software are built on top of the Eclipse architectural framework and its test, trace and monitoring extension, called the Test and Performance Tools Platform (TPTP). Both are open source projects that provide shared, open source services across tooling environments that target application development, testing, deployment and monitoring. By using this infrastructure, you can potentially eliminate proprietary data store formats and support both internal and third-party customization and contribution. An investment in tools based on Eclipse and TPTP can also help your organization avoid vendor lock-in and encourage future innovation.

Leverage the IBM Rational Software Delivery Platform

IBM Rational Functional Tester is an integral component of the IBM Rational Software Delivery Platform. One of the industry's most comprehensive and powerful solutions for software system creation and application lifecycle management, the IBM Rational Software Delivery Platform provides automation support for software development. Further, it can help unite team members by enabling them to share information effectively across various tools.

Because Rational Functional Tester integrates with the Rational Software Delivery Platform, you can access various software development lifecycle assets and achieve a shared user experience across team disciplines. From the perspective of functional testing, this helps ensure that your developers and testers can build, share and analyze functional tests from within the same UI they use to construct, test, deploy and monitor their applications using other tools within the Rational Software Delivery Platform.



For more information

To learn more about IBM Rational Functional Tester software, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/awdtools/tester/functional

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