



GH Tester

Automated quality for Cloud, CEP, SOA, BPM and other integration projects



About Green Hat

Green Hat is a testing technology leader, operating worldwide with a Global 2000 customer base. Green Hat makes automated testing simple for complex systems relying on Cloud, Web Services, messaging, SOA (Service Oriented Architecture), ESB (Enterprise Service Bus), BPM (Business Process Management), CEP (Complex Event Processing), SAP and other distributed computing technologies.

Make constant transformation sustainable with reusable tests and virtualization. Boost quality and performance to exceed business requirements. Automate now. Make business better. Learn more at www.greenhat.com

Adopted by leading companies around the world

Green Hat is in use by...

50% of the world's top 20 European and American banks

Source: Banker's Almanac, 2010

4 out of 5 of the top UK cellular phone operators

Source: www.wordiq.com, 2010

The largest railroad operator in North America

Source: www.railroadfocus.com, 2011

Germany and Europe's largest consumer electronics retailer

Source: www.billboard.com, 2009

North America's best managed insurance company

Source: Forbes, 2008

2 out of 3 of the world's largest publicly traded energy companies in the world

Source: Forbes Global 2000, 2009

GH Tester is an established, proven modular test automation suite specifically designed to address the challenges of testing distributed and/or complex systems. These systems can be legacy (e.g. files, FTP, middleware) or modern (SOA, XML, JMS, ESB, BPM, CEP, Cloud and so on). Often these systems do not have user interfaces but where they do, Green Hat has a UI testing module or can integrate with the customer's existing products (e.g. HP's QTP). SOA and BPM can bring many benefits, but at the same time add complexity through dependencies, users and system availability. Whether you have a TIBCO, Software AG webMethods, Oracle, IBM, SAP or other environment, we can help.

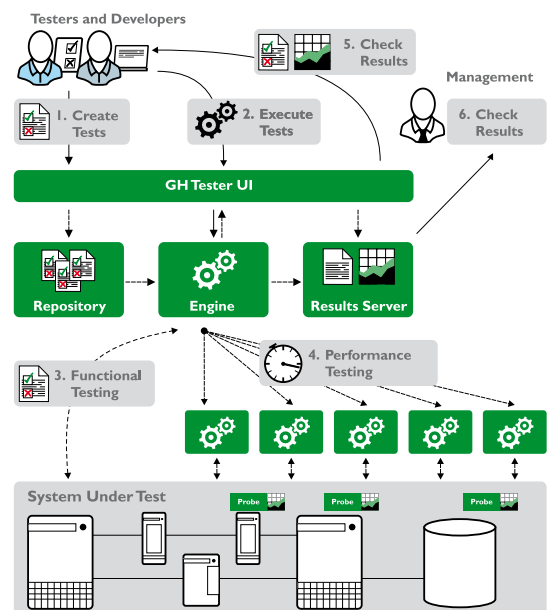
Scriptless

The last generation of test automation products required users to write code. GH Tester uses a series of configurable test steps that can be used to model any test script and correspond more closely to the actions that a tester would take. Examples include "Send a message", "Compare that message to the expected message", "Query a database", "Look in a log file for errors", "Examine these files and make sure they reconcile". There is no coding involved.

As there is no coding, emphasis is placed on wizards to help with operations such as test creation from schemas and message exchange patterns, as well as repairing damaged tests. At all times the objective is to remove manual, repetitive, time-consuming actions and allow the tester to concentrate on value-add activities.

Architecture

GH Tester has a user interface for managing test assets and for interactive execution and repair of test cases. Test cases can also be executed from the command line, ANT, Maven or via a test management product. GH Tester is an OSGI based application and uses many elements from Eclipse. A web-based component offers reporting via a thin-client interface.



GH Tester Architecture

Reporting

Test results are written into customizable reports that can be viewed using a web browser or within the product itself. The reports can be exported as PDFs or HTML pages, allowing import into Word and other packages and automatically emailed.

Virtualization included - not an extra

Working around systems down for maintenance, accessing services belonging to third parties without incurring fees or booking test sessions, and using enterprise applications without incurring additional complexity are challenges overcome easily with VIE Essentials, an integral part of GH Tester. VIE Essentials can simulate real system behaviors, such as different decision paths, deterministic and non-deterministic scenarios. This technology is extended to model-driven feature-rich virtualized applications through VIE Advantage, which includes database simulation, powerful virtualized application environment management and more.

Extending the potential of GH Tester

GH Tester offers a number of extension points for custom data transformation, validation, data transmission and reception, data formats and schemas, enabling you to cope with all the challenges in your enterprise and offering the ability to bring the power of GH Tester to legacy and custom systems.

Continuous Testing and Validation

GH Tester works well in continuous build server deployments (e.g. CruiseControl), running the tests at the appropriate time and reporting the results. GH Tester can also be used to perform continuous validation of production services, checking semantics and reporting response time violations (e.g. SLA breaches).

Test and Defect Management

GH Tester has rich integration with test management and defect tracking tools such as HP Quality Center and IBM's Rational Quality Manager, allowing tests to be executed from inside the test management tool and results reported back. JIRA, RTC and others are supported for defect tracking. Context information is included in the defect to accelerate resolution.

Supported Systems and Technologies

This list is updated constantly, so it is always best to contact us if seeking support for a specific system or protocol.

Messaging Protocols	SOA and ESB	Message Formats
29West LBM	CentraSite	.Net Objects
ActiveMQ	Oracle Fusion	ACH
Email (SMTP, IMAP)	SCA Domain	Bytes
Files	Software AG IS, BPMS	COBOL Copybook
FTP/S	Sonic ESB	Delimited
HTTP/S	TIBCO ActiveMatrix	ebXML
IBM WebSphere MQ	UDDI	EDI
JBoss MQ	Web Services	FIX
JDBC	WebSphere RR	Fixed Width
JMS (JBoss et al)	WSDL	HL7
SAP IDoc, BAPI, RFC & XI/PI	Other Technologies	IATA
Software AG's IB & IS	BPM	Java Objects
Solace	Databases	JSON
Sonic MQ	Log Files	MIME
TCP	WS-*	OAG
TIBCO Rendezvous, Smart	User Interfaces	REST & SOAP
Sockets & EMS	(separate module)	Software AG Broker Docs
Custom		SWIFT
		TIBCO ActiveEnterprise
		Variable Width
		XML (DTD, XSD, WSDL)
		Custom



Example test - no coding required

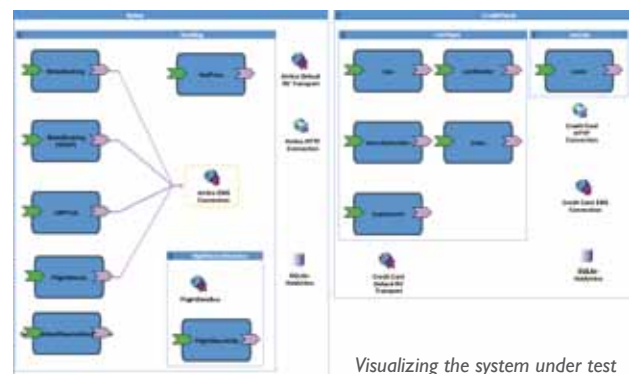
Performance Testing

GH Tester brings a middleware flavor to the problem of performance testing. This allows users to re-use any functional test as the basis of a performance test, blending together different types of interaction to test the impact of real loads on the server. Multiple agents can be used to generate load across a bank of machines. A graphical interface helps users to examine results from probes which are designed to detect operating system parameters as well as messaging specific data (e.g. retries).

How Do I Test?

Tests generally consist of one or more triggers to the systems under test, and then validation of results and side effects. Data from one step of a test can be used to feed the next step. GH Tester is purpose-built for testing, so every test step can do validation of its results if appropriate, there is no need to write extra steps to do this. Some of the example testing patterns are shown below, although any pattern can be tested including parallel execution paths.

Tests can be built by recording existing system behaviors or from requirements by entering in the data to send and the data expected back. In this way GH Tester supports many different development methodologies.



Find out more

70+ technologies and protocols supported, what are often seen as "extras" included as standard, and designed using deep integration expertise. Just a few reasons why the GH Tester suite leaves that "custom-made" impression with many satisfied customers around the globe. Whatever your environment (TIBCO, Software AG webMethods, Oracle, IBM, SAP, Cloud or other), we are ready to help you.



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