



# SOA AND MESSAGE-BASED APPLICATIONS TESTING



Most modern systems run on a message-driven architecture.

Using Green Hat's suite of testing solutions designed specifically for SOA and integration projects, StarBase can quickly and powerfully test the functionality and scalability of your key systems.

Much of the infrastructure underpinning modern systems is message-driven. Applications are highly interdependent and are often not screen-based, so the traditional linear GUI-based approach to testing will not work.

Typical challenges in testing message-based applications include:

- How can I ensure that the plethora of interconnected systems delivering service to my customers function and scale together?
- How can I test a new application when it interacts with so many internal and external systems?
- How can I test my new component while systems it needs to interact with are still in development?
- How can I reduce the cost of provisioning test environments for external systems?

## Green Hat's tools are designed to test message-based applications

**GH Tester:** for testing SOA and other integration projects. Compatible with over 70 messaging protocols, it creates and monitors system messages that enable the testing of all the dependencies in a complex SOA architecture

**GH Performance:** an extension to GH Tester that can inject a large number of message events and capture key performance data across multiples machines

**GH Virtual Integration Environment ('VIE'):** for simulating applications and test environments. Used when they are either unavailable or expensive to use for testing. Allows for generation of what-if scenarios.

### Solutions for:

- TIBCO
- SAP PI(XI)
- IBM WebSphere MQ
- Oracle Fusion
- JMS-based messaging
- Microsoft .NET
- Sonic MQ



### The benefits of testing with Green Hat tools

StarBase uses Green Hat tools to:

- Test earlier in the development cycle
- Simulate and test components that are either incomplete or unavailable
- Run multiple what-if scenarios to better understand where performance and function will deteriorate
- Reduce the need for expensive test environments by simulating their responses

### Benefits for our clients include:

- Reducing time to market for key upgrades and releases
- Reducing spend on test environments
- Removing the delays associated with waiting for test environments to be ready
- Removing the costs and delays of using developers to create test stubs
- Develop test scripts once: use for functional and performance testing
- Understanding earlier the performance impact of complex interdependent systems

Green Hat products eliminate the need for developer-created “stubs” and allow StarBase testers to create codeless virtualised applications. These virtual applications can be readily shared and easily updated as underlying systems and data change.



Green Hat tools enable you to automate SOA and BPM testing with GH Tester, virtualise unavailable applications with our Virtual Integration Environment (GH VIE), and test SOA and BPM performance with GH Performance. Companies all over the world rely on Green Hat to deliver the innovative testing software

they need for their SOA and BPM projects, including the application infrastructure that underpins emerging Cloud projects.

**Investment Bank: Global Listed Derivatives Trade Repository**

StarBase was asked by a major investment bank to test its new application, a trade transaction repository to be accessed globally in real-time. Using Green Hat products GH Tester and GH Performance to simulate hypothetical scenarios, StarBase uncovered where the application met its targets and where it needed further fine-tuning.

By virtualising scenarios, StarBase demonstrated the hardware and software solutions required, while the iterative testing cycle revealed the application's bottlenecks.

Working with the client's worldwide development teams, StarBase showed how the system's performance could be improved from 300 trades per second to a level of 2,000 trades per second.

Contact us to find out more about how we can simplify and quality assure the functioning and performance of your SOA and integration projects.

StarBase is the UK's leading performance testing consultancy, trusted by major enterprises to mitigate IT systems risk since 1992. We ensure the consistent performance of our clients' key systems. As specialists, we possess an unrivalled depth of experience, knowledge and insight, creating smart and value-adding solutions for complex situations.

<p><b>Performance Testing</b></p> <p>Combining the best testing tools with effective processes can improve the bottom line</p>	<p><b>Testing Tools</b></p> <p>Guidance on testing tool selection - the right tools for your technology challenges and to improve productivity</p>	<p><b>Functional Testing</b></p> <p>Smarter processes and greater automation will reduce cost and duration of the project</p>	<p><b>Managed Testing</b></p> <p>Let us take responsibility for all your testing requirements</p>
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