



Automation of Functional GUI Tests for Java Applications with qftestJUI

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Overview

- Quality First Software GmbH
- GUI Testing in General
- Specifics of Java/Swing Test Automation
- qftestJUI - Live Demonstration
- Summary
- Questions...

Quality First Software GmbH

- Established 2001
- Based near Munich
- Committed to quality
- Focus on Java and test automation
- Over 150 customers worldwide in all kind of business categories

Customers and Partners



GUI Testing in General

- Test the system as a whole through the GUI.
- Test from the point of view of the end user.
- Manual GUI testing is time consuming and tedious.
- Automation has a high potential for savings.
- Automation pays off only if tests remain stable over long periods.



Specifics of Java/Swing Test Automation

Advantages:

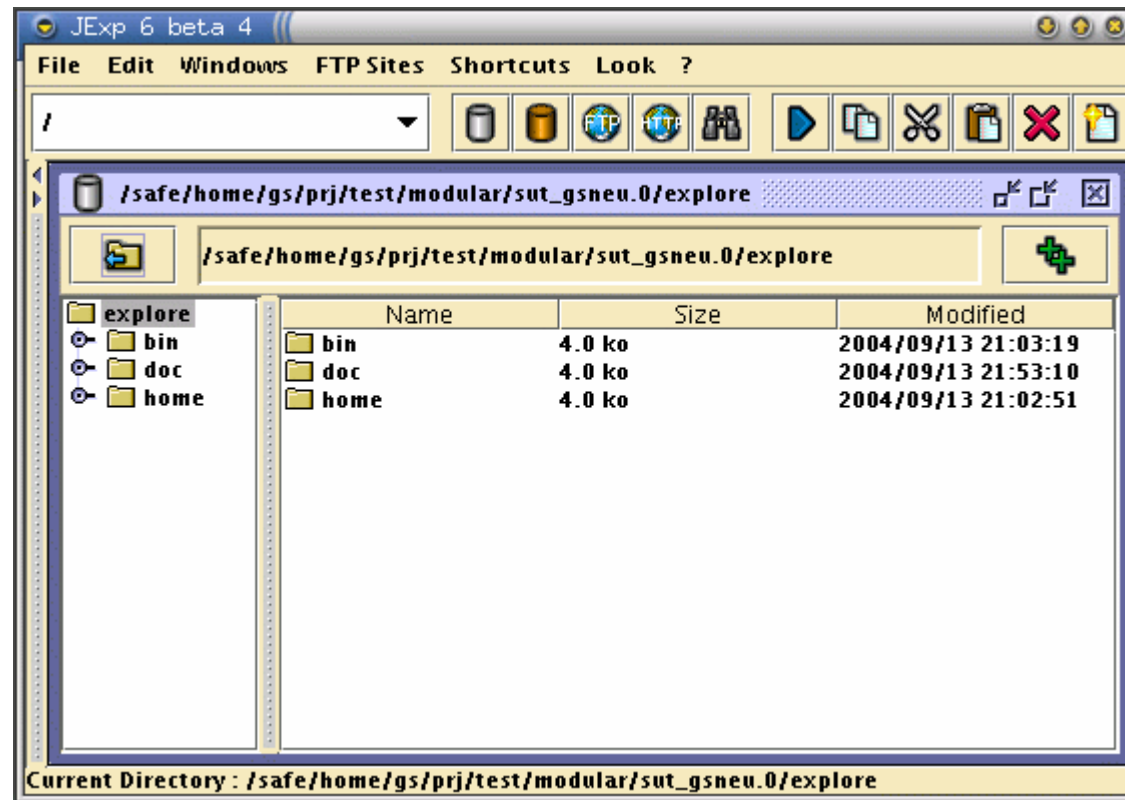
- Cross-platform testing: “Write once, test everywhere”.
- Developers can set individual identifiers for components.
- Access to the application's objects and methods.

qftestJUI - Live Demonstration

The screenshot displays the Test-suite [Options.qft] application. The main window is divided into three sections:

- Test-suite Tree (Left):** A hierarchical view of the test suite. The selected step is 'Check text [Text-table.column.number=>Options]'. Other steps include 'Setup: Start the application', 'Sequence: Table', 'Sequence: Tab', and 'Cleanup: Stop the application'.
- Check text Configuration (Right):** A panel for configuring the selected test step. It includes fields for 'Client' (Options), 'Component id' (Text-table.column.number), and 'Text'. There are also checkboxes for 'As regexp' and 'Throw exception on failure', and fields for 'Timeout', 'Error level of message', 'Id', 'Delay before (ms)', and 'Delay after (ms)'. A 'Comment' field is also present.
- Terminal (Bottom):** A text area showing the execution command and output. The command is: `"-DqftestJUI.home=C:\Programme\qfs\qftest\qftestJUI-1.03.0" "de.qfs.apps.qftest.start.StartClient" "de.qfs.apps.qftest.demo.Options" "--"`. The output shows: `----- Options:stderr -----` and `Configuration restored`.

Example SUT (System Under Test)



JavaExplorer – A typical file explorer implemented in Java
(JExp from SourceForge)

Why qftestJUI?

1. Cross platform testing
2. Support for trees and tables
3. Tests tolerant to software changes
4. Intuitive user interface
5. Ease of use due to capture/replay
6. Clear structure of complex test cases
7. Integrated debugger
8. Direct Access to Java API
9. Industry standards XML, Python
10. Comprehensive documentation



Coming soon...

11. SWT / Eclipse
12. Legacy testing with Java Terminal Emulation
13. Live unit tests



Thank you for your attention

Intrigued?

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www.qfs.de