froglogic

Squish – Automated Testing of Embedded Qt and Qt Quick HMIs

froglogic's cross-platform automated testing suite Squish is a complete tool for GUI testing and code coverage analysis. It supports many advanced and unique features that cater to the needs of embedded software developers.

Squish Testing Suite

The Squish suite consists of two essential testing tools.

Squish
GUI Test Automation

Use the GUI Testing Tool for automated testing of all kinds of desktop, mobile, embedded and web applications.

Coco
Code Coverage Analysis

Use Coco to analyze the test coverage of C, C++, C# and Tcl code.

Leverage froglogic's Squish for Qt and Squish Coco to accomplish the challenging task of automating embedded GUI and HMI tests as well as analyzing code coverage of tests in compliance with industry safety standards, such as IEC 61508, ISO 26262, EN 50128 and DO-178C.

Our Clients

Qt, Transics a WABCO company, Rohde&Schwarz, Rockwell Automation, St. Jude Medical, PRÜFTECHNIK, Dräger, BOSCH, FLIR, CLAAS, ARM, SIEMENS

Many leading Automotive, Medical Avionics, Transportation, Industrial, Consumer Device, Household Appliance, and Home Automation companies use Squish Testing Suite to automate the testing of their embedded HMIs and connected devices.

Learn More and Get in Touch

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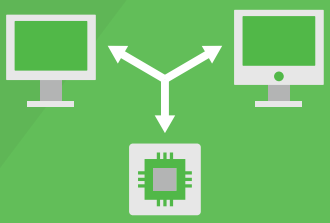
Qt GUI Test Automation on Embedded Targets



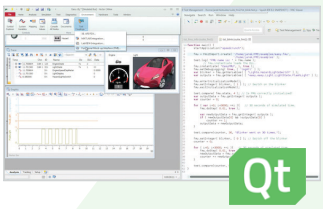
Squish for Qt features dedicated support for automated testing of Qt Widgets, QML and Qt Quick Controls, as well as embedded Qt Webkit and Qt WebEngine content.

Due to Squish's real cross-platform support, tests can be automated against desktop builds of Qt HMIs, in emulated/simulated environments, as well as on the real target hardware.

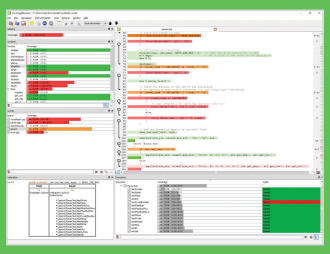
Qt IVI and Functional Mock-up Interfaces

Squish provides bindings for supporting other test components and tools, through the Qt IVI module, as well as through Functional Mock-up Interfaces, a popular industry standard in the embedded industry.

This makes the Squish test suite a perfect fit for driving complete system tests.



Code, GUI and HMI Coverage Analysis



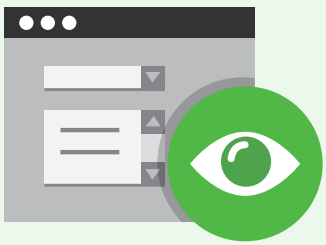
The only way to measure properly the quality of testing is to understand how much of the application's source code and user interface is covered by tests, and where the "black holes" are.

With Squish for Qt's GUI coverage support, and Squish Coco's support for all code coverage levels up to MC/DC and MCC, this satisfies industry standard requirements for the highest safety integrity levels (SIL).

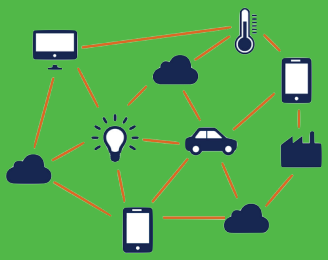
Visual Verifications

Visual verifications are a hybrid form of property verifications and screenshot verifications. Both types of checks are combined into a single complex algorithm to find the best possible match.

This is especially useful for automated system tests which need to verify not only the correct functional behavior of the application, but also the visual appearance.



Automate End-To-End Tests of Connected Devices



Many of today's embedded devices, such as Car IVIs, medical devices, home automation robots, or other specialized devices are communicating with cloud-connected companion Apps or web interfaces.

By combining Squish's multi-application testing, and support for different GUI platforms from a single test, hybrid end-to-end tests for connected devices can be fully automated.