



QUICKCHECK

Modern software can have many different configurations, and that implies potential for lots of errors in differing scenarios. QuickCheck is an innovative software testing tool that implements the property-based testing paradigm. It enables users to create a property for one state and QuickCheck will automatically create thousands of different test cases to verify whether that property indeed holds. Whenever a test generated by QuickCheck fails, QuickCheck will automatically limit the failing case by removing steps from it until only those steps that contribute to the errors are left. QuickCheck speeds up the process from creating specifications to identifying bugs.

SPEED UP YOUR
SOFTWARE
PRODUCTION

QUICKCHECK TESTING HAS:

CONCISE
SPECIFICATIONS

CONTROLLED
RANDOMNESS

AUTOMATIC
SIMPLIFICATION

STATE MACHINE
TESTING

If software quality - and by inference product quality, matter to you, QuickCheck can help you find bugs early. The specification language for QuickCheck is Erlang, which is developed and maintained as open-source. Only the QuickCheck libraries themselves are proprietary. Linking QuickCheck specifications to code under test in other languages (such as C), or via TCP/IP, is easy to do thanks to Erlang's built in support for external languages. QuickCheck can be integrated into your regression testing framework to automate testing of your edge cases ensuring change doesn't break existing functionality.

Erlang Solutions are partners with Quviq- the producers of QuickCheck and we have extensive expertise in Property-First Development (PFD) using QuickCheck. PFD is like test-driven development on steroids, and we use it in all our projects where appropriate. Test suites and QuickCheck properties are automatically executed for each build using our in-house build system.

www.erlang-solutions.com

PARTNERSHIP

Erlang
SOLUTIONS

We have extensive experience with load testing and live debugging of Erlang-based products, and offer a special course for test and support engineers. We have also applied our test automation and property-based testing techniques to non-Erlang components and embedded devices. If you are looking to use Erlang solely for your test automation needs, we will be happy to help you get started. www.erlang-solutions.com



OUR EXAMPLES OF USING QUICKCHECK

TESTED
ERICSSON'S
4G RADIO BASE
STATION

DEVELOPED
MISSION-CRITICAL
SOFTWARE AT
MOTOROLA

DEVELOPED A
WEBMAIL SERVICE
FOR 2MLN USERS
AT LAUNCH

ENSURED DATABASE
RELIABILITY AT BASHO
TECHNOLOGIES

BENEFITS

- Save work by creating your tests automatically
- Shorten your time to market by testing more effectively
- Improve the quality of your product by testing more scenarios
- Reduce risk by detecting errors early in development
- Save time by automatic error analysis
- Reduce maintenance cost of large test suites by introducing generic properties and removing "bespoke" tests
- Find latent bugs within your existing software products

OUR CLIENTS



ABOUT ERLANG SOLUTIONS

Founded in 1999 soon after Erlang was released as open source. We specialise in providing businesses with truly scalable solutions through the creation, integration, delivery and lifetime support of products and services based on the Erlang programming language. Our HQ are in London and our team has worked with over 300 clients from our offices in Stockholm, Krakow, Budapest, Berlin, San Francisco, Seattle and Buenos Aires.

OUR OFFERING

SERVICES End-To-En Solutions | Consulting | Support | Development | Mobile | Training

PRODUCTS MongooseIM | Riak KV | WombatOAM | Sardina | LSD | QuickCheck

MegaLOAD | Linc & Loom | Elvis | RabbitMQ

INDUSTRIES Online Gambling & Betting | Telecoms | Financial | Advertising & New Media | Gaming

EVENTS Erlang Factory | Erlang User Conference | Code Mesh | ElixirConf

COMMUNITY Development | Education | Support | Research | Recruitment

