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.

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.
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

<table>
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<tr>
<th>Tested</th>
<th>Developed</th>
<th>Developed A</th>
<th>Ensured database</th>
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<td>Ericsson’s 4G Radio Base Station</td>
<td>Mission-Critical Software at Motorolla</td>
<td>Webmail Service for 2MLN Users at Launch</td>
<td>Reliability at Basho Technologies</td>
</tr>
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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

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

OUR CLIENTS

Our experts at work:

- Ensured database reliability at Basho Technologies
- Developed a webmail service for 2MLN users at launch
- Developed mission-critical software at Motorolla
- Tested Ericsson’s 4G radio base station
- Developed a mission-critical software at Motorolla
- Ensured database reliability at Basho Technologies

OUR CLIENTS

Grindr
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William Hill
VMware
Vocalink
Infoblox
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