Software Testing and Analysis Tools

For quality and productivity.
✓ Verifysoft Technology
✓ Cost of Software Errors

✓ Code Coverage
✓ Code Complexity
✓ Unit Tests
✓ Static Code Analysis
✓ Model based Testing
✓ Automatic Test Generation/Test Execution

✓ Seminars
Contact

Technologiepark Offenburg
In der Spoeck 10-12
77656 Offenburg
Germany

✓ Phone:    +49 781 127 8118-0 (Germany)
✓ Phone:    +33 3 68 33 58 84 (France)
✓ Fax:      +49 781 63 920-29
✓ Email:    info@verifysoft.com

www.verifysoft.com
✓ Founded 2003

✓ Headquarter Technologie Park Offenburg (Germany)  
   Office in France, worldwide Distributors

✓ 500+ customers in 40+ countries (2016)  
   (Europe; Asia; North, Middle and South America, Australia)

✓ Owner of Testwell Tool (CTC++, CMT++/Java, CTA++, ...)
   Development and Support

✓ Distribution and support of complementary software
   testing and analysis tools in Europe

✓ Seminars
Partners

Testwell
Tampere (Finland)

GRAMMATECH
Ithaca/New York (USA)

Imagix
San Luis Obispo/CA (USA)

CONFORMIQ
Saratoga/CA (USA)

eLVior
Tallinn (Estonia)
Our **main activity** fields:

- Aerospace
- Automotive
- Medical
- Automation
- Transport
- Energy

... and other fields for **critical software**.
Software bugs in Europe cost:

100 to 150,000,000,000 Euros a year

✓ Tendency still increasing
✓ Complexity of software doubles every 18 months

(Les Hatton, Kingston University London)
Software bugs cost up to:

14.000.000 Euros per company and per year

✓ 50% of the companies in the first year of utilization found up to 10 critical errors.

✓ 40-60% of the global budget is usually used for testing and correction

IDC-Survey in 2008 ‘Improving Software Quality to Drive Business Agility’, within American companies with 250-10,000 employees www.idc.com
Testing code is essential but:

- expensive and repetitive
- challenging with complex code

Testing tools provide help by:

- indicating traps
- finding critical bugs (even rare ones)
- generating test cases (automatically)
- executing tests (automatically)
Testing (Code Coverage and Static Analysis) is mandatory for safety critical software:

- DO-178C (avionics)
- IEC/EN 61508 (general)
- ISO 26262 (automotive)
- IEC/EN 50128 (railway)
- IEC 60880 (nuclear power)
- IEC 62304 (medical devices)

Our tools support you to achieve highest code quality.
Testwell CTC++ Test Coverage Analyser for C and C++
CTC++ add-on for Java and Android
CTC++ add-on for C#

All coverage levels
- Statement coverage
- Function coverage
- Decision/branch coverage
- Condition coverage
- Modified condition/decision cov.
- MC/DC coverage
- Multicondition coverage (MCC)

All compilers
All embedded targets!
Works with all unit test tools

Compliance with Standards
DO-178C - IEC 61508 - IEC 62304 - ISO 26262
Testwell CMT++ / CMTJava
Code Complexity Measurement Tools

for C, C++ (C#) and Java

Lines of Code Metrics
Halstead Metrics
McCabe Cyclomatic Number
Maintainability Index
Testwell CTA++  C++ Test Aider

Unit test tool for C++
CodeSonar
Static Code Analysis

Finds twice as many critical defects compared to other static analysis tools.

Improves security

Designed for high assurance

Employs sophisticated algorithms

Supports custom checks

Provides architecture visualisation
Tools

Imagix 4D

Reverse Engineering
Source Code Checks
Static Analysis & Metrics
Delta Analysis
Automated Documentation
Visualization of Code Coverage measures by Testwell CTC++
Conformiq Tool Suite
(Modeler and Designer)

functional / Black Box Testing
Elvior TestCast

TTCN-3 Test Development and Execution Platform

- Full-scale TTCN-3 test development tool with TTCN-3 editor, compiler & executive.

- Model-based testing from requirements modeling to test execution results and analysis.
Testing Embedded Systems
Test Management
Efficient Unit Tests, ...
Thank you for your time! Your Verifysoft Team.

And See you on:  

LinkedIn  
Twitter  
viadeo  
YouTube