LDRA
Software Technology

Data Sheet

Achieve Secure Software Compliance with TBsecure®

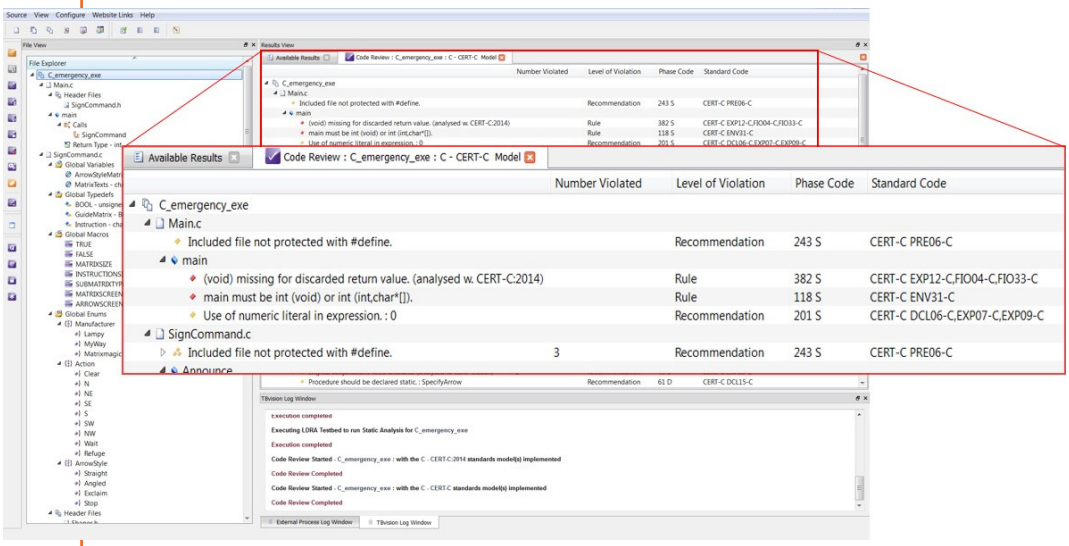
FEATURES

- Easily identifies potentially exploitable security vulnerabilities in source code.
- Enforces CERT C, CERT Java and CWE guidelines for secure coding in the C and Java programming languages.
- Automates coding standards compliance, eliminating the tedium and errors associated with manual code standards enforcement.
- Supports the software lifecycle from requirements through coding, analysis and verification.

Perform code review against CERT C/C++/Java and CWE secure coding guidelines to show:

- ✓ Graphical mapping of code under development to standard violations
- ✓ Code complexity and coverage metrics
- ✓ Data flow analysis
- ✓ Run-time error checking
- ✓ Complete documentation for certification
- ✓ Management of all certification assets

TBsecure identifies security vulnerabilities and common programming errors and extends secure programming and security standards throughout the complete software development lifecycle.



TBsecure's tangible benefits deliver an immediate return on investment.

CERT C, a secure coding standard developed by Carnegie Mellon Software Engineering Institute, provides a set of secure C coding guidelines designed to eliminate insecure coding practices and undefined behaviours that can lead to exploitable software vulnerabilities.

CWE, developed by the National Cyber Security Division of US Homeland Security, provides a unified, measurable set of software weaknesses that identifies weaknesses in source code and operating systems. CWE guides the architecture and design of secure software and its tools.

Video: Dr Mike Hennell
"How to Achieve Safe and Secure Software"
www.ldra.com/safety-security-video

With increased system connectivity, breaches in software security have become all too common. LDRA has developed *TBsecure* to secure software and to enable developers to certify to common security standards such as the CERT C Secure Coding Standard (CERT C) and the Homeland Security's Common Weakness Enumeration (CWE), which identify the common programming errors behind the majority of software security attacks.

TBsecure programming rules classifies standard security risks as:

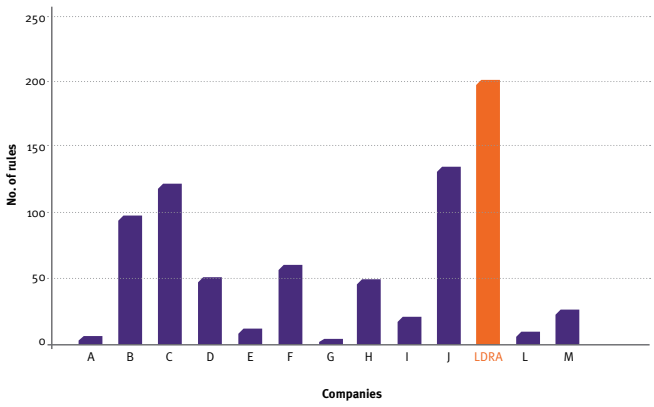
• Dynamic Memory Allocation (A) concerns

A common source of programming flaws, dynamic memory management can lead to security issues such as memory buffer overflows, dangling pointers, and double-free issues. TBsecure monitors how the software allocates memory, reads and writes to memory, deallocates memory as well as any other memory management activities.

• Vulnerabilities (V)

Vulnerability rules eliminate insecure coding practices not associated with dynamic memory such as out-of-range array indices and dereferencing a null pointer.

LDRA's implementation of CERT C rules covers 33% more rules than other tool vendors *



Tool	No. of rules
A	7
B	96
C	122
D	50
E	11
F	63
G	3
H	48
I	21
J	135
LDRA tool suite	**201**
L	10
M	26

*The number of rules are subject to change based on continual development of the standard. Correct at time of publication.

LDRA Leads Industry in Quality and Standards Compliance

Proven Standards Conformance

LDRA boasts a long-time commitment to programming standards, actively participating on many language and standards committees throughout the industry. Adherence to the CERT C Secure Coding Standard and Homeland Security's CWE extend LDRA's leadership in providing software developers with the tools they need to certify in a connected world.

Top Manufacturers Rely on LDRA

LDRA's products and services are widely used by companies whose names are synonymous with security-sensitive embedded systems including Elbit Systems, eSysTech, Honeywell, Lockheed Martin, NASA, Presagis, Raytheon and Rockwell Collins.

Certified Quality Products

LDRA's Quality Management System is certified to ISO 9001:2008 and the LDRA tool suite® is SGS TÜV Saar certified and fulfils the requirements for supporting development to IEC 61508, IEC 62304, IEC 60880, EN 50128 and ISO 26262.

Contact us for more information or a 30 day FREE trial
w www.ldra.com | **e** info@ldra.com

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