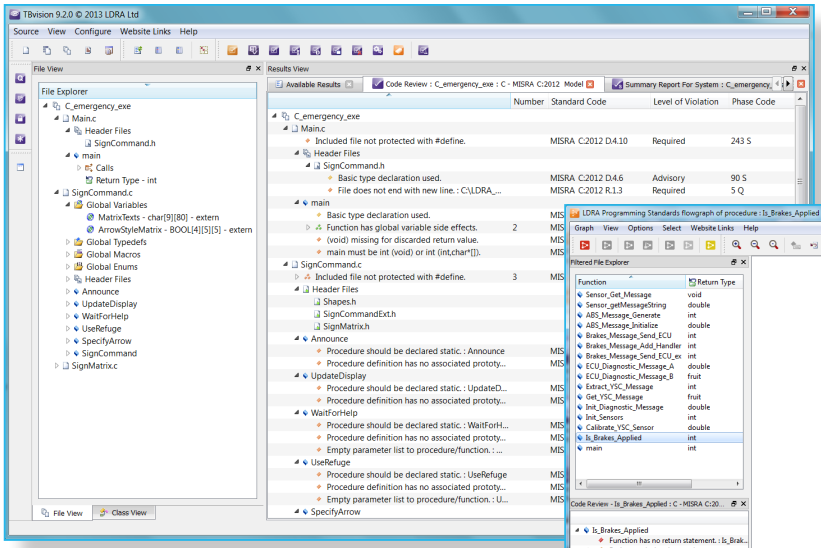
LDRA
Software Technology

Product Overview

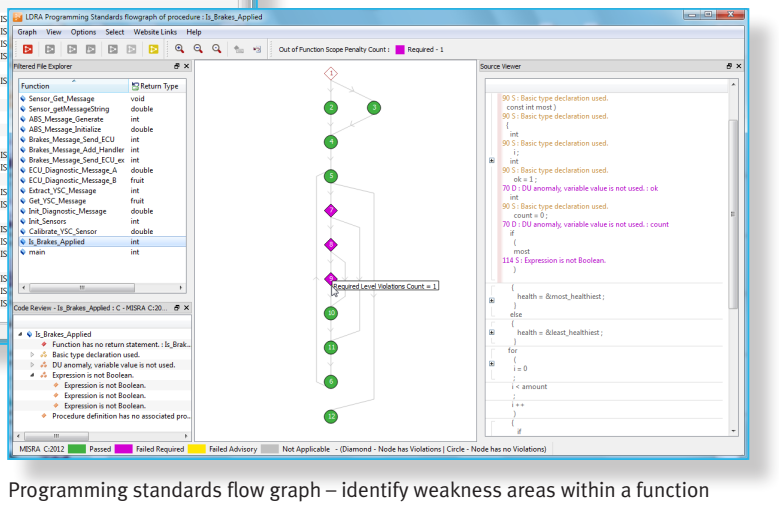
MISRA C:2012 | MISRA C++2008
MISRA AC | MISRA-C:2004 | MISRA C:1998

Automate MISRA Coding Standards Compliance

LDRA offers the most comprehensive and automated approach to meeting any MISRA standard through a range of compliance products, from a standalone rule checker to a portfolio of tools that integrates MISRA compliance into the software development life cycle.



Code review – showing system wide violations



Programming standards flow graph – identify weakness areas within a function

Key Details

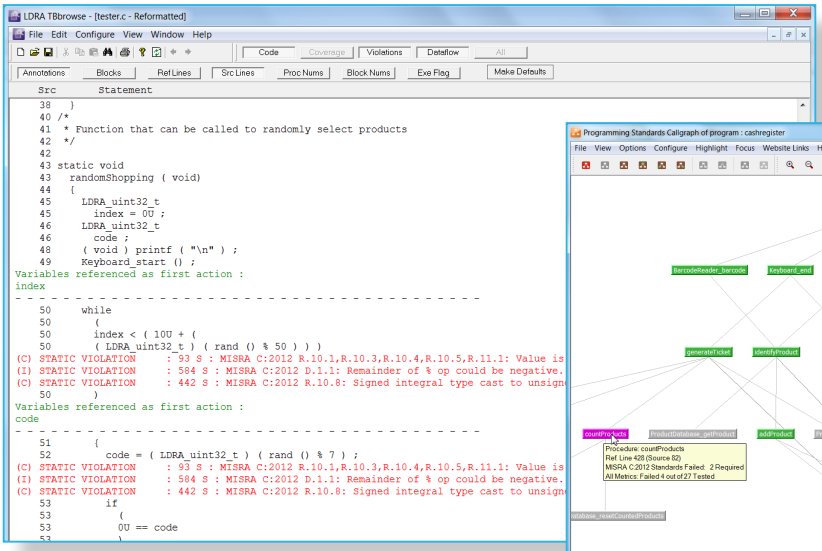
- Automatically detects and reports MISRA violations in easy-to-view formats
- Instantly generates documentation that highlights violations
- Cross-references to the relevant MISRA rule
- Integrates MISRA compliance into environments that require traceability and safety-standards qualification / certification evidence
- Recommended for DO-178B/C (aerospace), IEC 61508 (industrial safety), IEC 62304 (medical devices) and EN 50128 (rail transportation).

Benefits

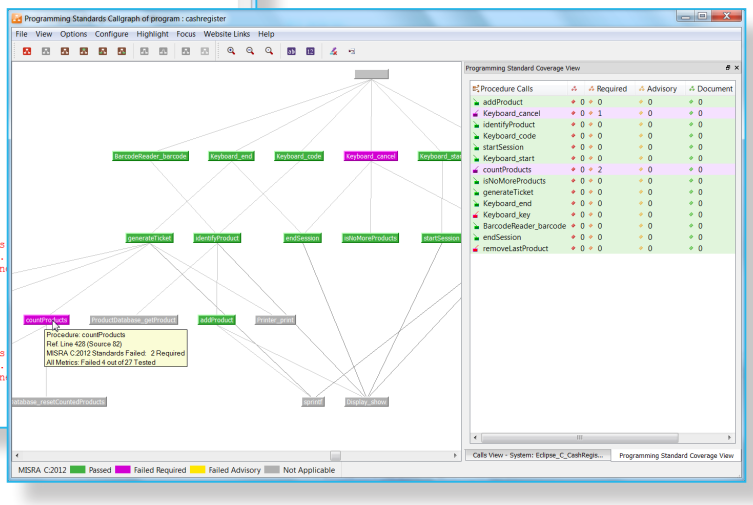
- Comprehensive rule compliance traceability within the verification suite or within a standalone product
- Full support for any MISRA standard within a single environment*
- Run-time error checking
- Software life cycle support from requirements through coding, analysis and verification
- Automatic documentation and tool qualification for a broad range of certification standards
- Management of all certification assets
- Configurable for compiler-dependent features and host/target testing.

The *LDRA tool suite®* is the only solution that lets developers integrate the MISRA standard into the software development process, with full MISRA compliance from requirements traceability through coding, analysis, testing, verification and certification.

For those development environments that only require standards compliance, the *LDRArules™* point solution offers a cost-effective option that is easily configurable for the full MISRA standard or for any user-defined combination of in-house programming templates and industry-standard rules.



Annotated code – display MISRA violations in line with code



Programming standards call graph – easily see problem areas in file/system

LDRA Leads Industry in Quality and Standards Compliance

Proven Standards Conformance

Focused on establishing strong C and C++ language standards, LDRA has implemented many programming standards including MISRA C:2012, MISRA C++:2008, MISRA-C:2004, MISRA C:1998, CERT C Secure Coding standard, HIS, JPL safety critical C, GJB Chinese Military standard, the Embedded C Coding standard, JSF++ AV standard, High-Integrity C++ Coding Standard** and the LM Train Control Program (LMTCP).

Key Members

LDRA's long-standing leadership in developing and supporting safety- and security-critical industry standards includes three members of the MISRA C Working Group and MISRA C++ Working Group, as well as chairmanship of the MISRA C++ Working Group.

Top Manufacturers Rely on LDRA

LDRA's products and services are widely used by companies whose names are synonymous with embedded electronic systems including Airbus, Aselsan, BAE Systems, Chrysler, Denso, GE, Honeywell, Lockheed Martin, NASA, Northrop Grumman, Rockwell Collins and Raytheon.

For more information or to arrange a demonstration

w: www.ldra.com e: info@ldra.com

* For all rules that are statically analysable by a tool. For more information visit www.ldra.com/misra
** High-Integrity C++ Standard: © The Programming Research Group