



LDRA

Company Profile

Do-178B/C System & Unit Testing
Source Code Analysis Complexity Metrics
DEF-STAN 00-56 Embedded Systems Testing
MISRA Checking Requirements Traceability Code Coverage IEC 61508

About LDRA

For more than 40 years, LDRA has developed and driven the market for software that automates code analysis and software testing for safety-, mission-, security- and business-critical markets.

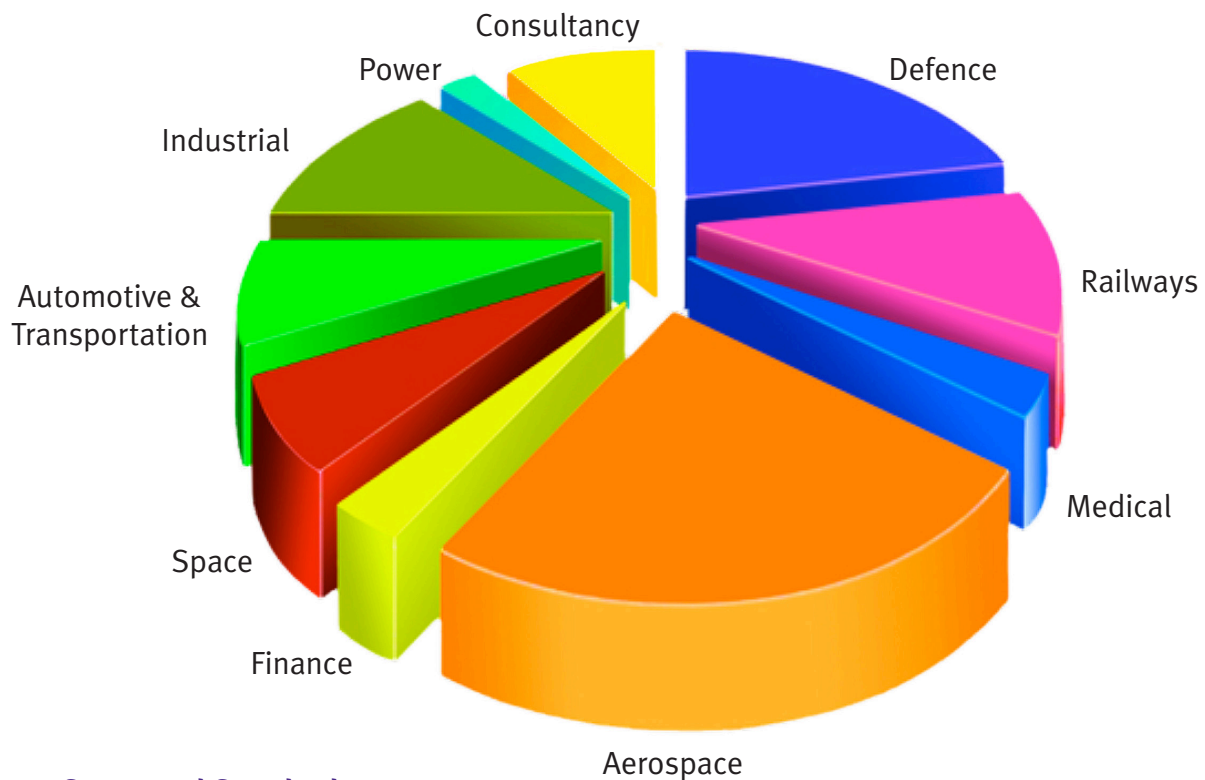
Working with clients to achieve early error identification and full compliance with industry standards, LDRA traces requirements through static and dynamic analysis to unit testing and verification for a wide variety of hardware and software platforms.

Boasting a worldwide presence, LDRA is headquartered in the UK with subsidiaries in the United States and India coupled with an extensive distributor network.

For more information on the LDRA tool suite, please visit www.ldra.com.

Customer Profile

Users include major national and multinational companies and agencies of the British, American and other governments:



Supported Standards

DO-178B/C	ISO 26262
DO-278	IEC 62304
MISRA C:2012, MISRA C++:2008, MISRA C:2004 and MISRA C:1998	IEC 61508
	EN 50128
JSF++ AV	High Integrity C++
CERT C	IPA/SEC C
CWE	Netrino C
Def Stan 00-55	HIS

The LDRA tool suite

LDRA Testbed®

LDRA Testbed provides the core static and dynamic analysis engines for the LDRA suite of tools. This technology analyses both host and embedded software in a rigorous and systematic manner. *LDRA Testbed* is the proven technology foundation for supporting all software development efforts requiring certification or formal regulatory approvals.

TBrun®

TBrun provides a GUI-driven interface for creating unit and module test cases for either host or target-based software. Test harnesses are automatically generated and *TBrun*, also supports the creation of stubs for code that is outside the scope of the tests. Structural coverage analysis can also be included in the test harness, helping to ensure that the defined test cases execute 100% of the code under test. Formal test reports are produced and the generated test harnesses serve as a regression test environment for future development phases.

TBreq®/TBmanager®

TBreq supports the tracing of requirements through the software development lifecycle. *TBmanager* adds a task-oriented interface providing a common user experience across all *LDRA tool suite* modules and across the development team. High-level requirements captured in standard office documents or third party solutions, such as DOORS, Visure Requirements or Requisite Pro can be traced through lower level documents to the code itself. The end result is a Requirements Traceability Matrix (RTM) that captures how each high-level requirement was traced to the final software product, including the associated verification activities and results.

TBvision®

TBvision presents code standard violations and software flaws in the context of the original source code. The interactive environment, enabling the execution of both static and dynamic analysis on a user-defined scope, allows switching between

reported violations, the original source code and any of the *LDRA Testbed* supported coding standards. In so doing *TBvision* clarifies why an issue is being reported and what remedial action is required. Software integrity can also be measured and reported in terms of quality, security, or simply the presence of defects (including dynamic memory errors). *TBvision* presents the identified software flaws from any of these perspectives and identifies the issues that need to be addressed to ensure that a software project meets its objectives.

Target Licence Package (TLP)

The *Target Licence Package (TLP)* provides the right to use and to receive support for the *LDRA tool suite* when it is used for target testing. The *TLP* allows the user to receive assistance from LDRA in configuring the *LDRA tool suite* to interface with a specified embedded tool chain.

Tool Qualification Support Pack (TQSP)

Tool qualification is becoming increasingly important if not a requirement in some safety- and security-critical markets. The *TQSP* supports clients through the process of qualifying the *LDRA tool suite* for use as a verification tool in their project environments.

LDRAcover®

LDRAcover utilises *LDRA Testbed* technology to provide extensive test effectiveness feedback generated through structural coverage analysis reporting facilities. *LDRAcover* addresses the rigorous structural coverage objectives of standards such as DO-178B/C (Avionics) up to and including Level A.

LDRArules®

LDRArules leverages *LDRA Testbed* to enforce compliance with industry or user-defined coding standards and provides clear visibility of software flaws that might typically pass through the build and test process to become latent problems. Most industry standard rule sets are supported off-the-shelf with additional compliance checks made available on an as needed basis.

LDRA Certification Services

The comprehensive compliance management solution for: Avionics (DO-178B/C, DO-278A & DO-254), Medical Devices (IEC 62304), Industrial Safety (IEC 61508), Nuclear Power (IEC 60880), Automotive (ISO 26262) and Rail Transportation (EN 50128).



3 Easy Steps to Get Started:

Step 1: Receive a Free Telephone / WebEx Consultation with Todd R. White, LCS Team Lead.

Step 2: Review your Free Certification Roadmap Prepared by the LCS Team.

Step 3: Implement the Certification Roadmap.

LDRA Training Services

LDRA offer training courses for developers and testers who are already using or intend to use the LDRA tool suite, and wish to become familiar with the source code analysis techniques and methodologies that it supports. These courses aim to provide delegates with a thorough understanding of advanced testing methodologies and compliance with industry specific standards.

LDRA are pleased to announce customised training courses for DO-178B/C and DO-254 applications from Level A DER's. Please contact info@ldra.com for more information.

Track Record

The LDRA tool suite is utilised by the following companies:



www.ldra.com

LDRA

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