![LDRA Software Technology]

QinetiQ — LDRA Putting the Standards to the Test

The Client

QinetiQ's Avionic Systems Integration Group (ASIG), located at Boscombe Down, England, has a proven track record in the provision of innovative, practical and cost effective solutions to system integration needs in support of research, development and operations.

Hercules

The Projects

ASIG use the **LDRA tool suite** to verify compliance to project coding standards for the Jaguar and Hercules aircraft.

The Jaguar project was Power PC based using the C language with 250,000 lines of code to test. Within this framework the **LDRA tool suite** was adopted as the primary code analysis tool for the critical validation and verification phases of the project.

The Requirements

ASIG needed an automated solution to demonstrate that their software complied with project coding standards. The standards were MISRA C, QinetiQ Safer Subset of C and DO-178B.

For several years LDRA has provided QinetiQ with sophisticated software testing tools in the form of the **LDRA tool suite.**

Through the use of the **LDRA tool suite** QinetiQ have been able to apply best practice testing techniques to a number of key projects to ensure that their software meets the required standards.

The Solution

The Jaguar and Hercules are both front-line aircraft with key roles to play in the UK's defence strategies both at home and abroad. As such, LDRA are proud to be associated with the important software development and testing process that is provided by QinetiQ.

In commenting on LDRA's position within this process, Gary Sheppard, Senior Software Engineer with ASIG said: *"LDRA is becoming so popular here that once software engineers have used the LDRA tool suite they are insisting they need to have it available at all times."*

Jaguar

The Benefits

All organisations that are required to adhere to specific industry standards need to be 100% confident that the software they are developing is thoroughly tested.

In using the **LDRA tool suite** QinetiQ gained credibility from the test and evaluation service, which helped enormously in promoting their overall business credibility.

ASIG also use the **LDRA tool suite** to automatically generate the main structure of detailed design documents. The automatically generated code comments save up to 50% of the normal time taken to produce these documents.

LDRA have produced a DO-178B certification pack which assists the certification process and removes much of the work involved.

To find out more about saving money and improving quality of service contact LDRA

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