QA·MISRA C++ Summary

MISRA C++ Enforcement

The MISRA C++ guideline form a set of restrictions and a safe subset of the C++ language suitable for the development of safety critical systems and other embedded applications.

The standard draws from established coding standards such as MISRA C, Lockheed Martin’s Joint Strike Fighter Air Vehicle C++ coding standard (JSF++) and PRQA’s High-Integrity C++ coding standard (HIC++), and is intended to contain a set of guidelines and best practices understandable to a wide audience.

MISRA-C++ Compliance Module

PRQA, the world leader in coding standard enforcement and language-based static analysis, offers a compliance module for its industry-leading QA-C++ analysis tool to enforce the MISRA-C++ coding standard. QA-MISRA C++ continues our excellence in the highest possible enforcement of standards.

Key benefits

- Adopt safe usage of C++ language
- Enforce and report on an effective coding standard and best practices
- Comprehensive integrated advice on the guidelines
- Improve your software integrity
- Applicable to all software domains – initiated by the automotive industry
- Audit document to prove adherence to the standard

Key facts

- Fully integrated MISRA C++ compliance for QA-C++
- Highest available enforcement of MISRA-C++:2008 coding standard
- Project based compliance reporting to the MISRA-C++:2008 standard
- Fully configurable to customer projects
- PRQA is a founding member of the MISRA committee

MISRA C++ qualities

- Eliminate undefined behaviour
- Eliminate or mitigate implementation defined behaviour
- Improve clarity for review and maintenance.
- Provide a consistent style across a program or set of programs
- Avoid common programmer errors
- Incorporate good practice, particularly with regard to ‘future proofing’
MISRA C++ Compliance

Using PRQA’s Message Browser, online help and targeted MISRA C++ messaging, developers can effectively produce MISRA C++ compliant code. Using a variety of output reporting, organisations can report, audit and proof their compliance to the MISRA standard.

About PRQA

PRQA, founded in 1986, is the world’s leading developer of software source code analysis technologies. With over 3,000 customers worldwide, PRQA is a global provider of solutions that enforce coding standards to ensure software quality.

PRQA has representation on and close affiliation with the following standard bodies:

- ISO C Committee
- ISO C++ Voting Member
- MISRA C Founding Member
- MISRA C++ Founding Member

Providing products and services to industries including:

- Aerospace
- Automotive
- Defense
- Chip Manufacturing
- Finance
- Industrial Applications
- Medical Device
- Telecommunications
QA Systems and Programming Research Ltd

QA Systems is an authorised reseller of the QA·C / QA·C++, QA·Verify static testing tools and their compliance module add-ons, which are owned by Programming Research Ltd.

QA·C ®, QA·C++ ® and QA·Verify ® are registered trademarks of Programming Research Ltd. These tools and this document are the copyright © 2016 of Programming Research Ltd.

Third party trademarks, logos and trade names appearing in this document are the trademarks and property of their respective owners.

QA·C, QA·C++ and QA·Verify, offer the closest possible examination of C and C++ code. All contain powerful, proprietary parsing engines combined with deep accurate dataflow which deliver high fidelity language analysis and comprehension. They identify problems caused by language usage that is dangerous, overly complex, non-portable or difficult to maintain. Plus, they provide a mechanism for coding standard enforcement.

Contact Us

For further information regarding QA·C, QA·C++ and QA·Verify and compliance module add-ons, please contact QA Systems at info@qa-systems.com where appropriate QA Systems will re-direct you to Programming Research Ltd.