

PRODUCT OVERVIEW



 **MISRA Compliance Module**

QAC MISRA Compliance Module

'Guidelines For The Use Of The C language in Vehicle Based Software' is a document, which was published in 1998 to promote safe use of the C language in the automotive industry. It contains rules defining a subset of the C language, which is now been widely accepted as a model for good programming practice. The MISRA Guidelines are now also being adopted in Aerospace, Telecomms and Medical companies as a basis for ensuring the integrity of code.



Annotated Source Code

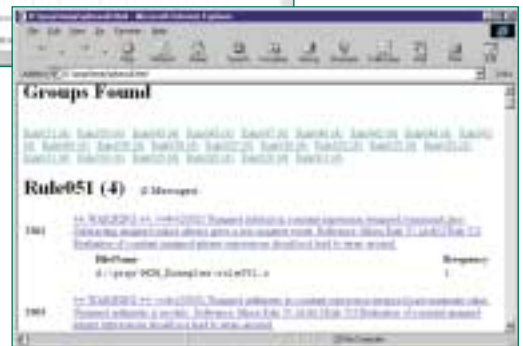
Overview of QAC MISRA Compliance Module

QAC, the leading static analysis tool for C Code development, is used worldwide by the leading automotive companies to improve software quality. Using the QAC MISRA Compliance Module they are able to enforce compliance with the MISRA C guidelines.

With the aid of the MISRA Compliance module, QAC analyses source code and detects constructs, which do not comply with MISRA C rules. Rule violations are clearly identified in annotated source code, code quality summary reports and a full suite of graphical views. One of the most powerful features of QAC is that it is highly configurable. QAC warning messages are directly linked, via HTML, to all occurrences of that message within the analysed source code and also to the appropriate MISRA rule reference. These references include explanatory examples of alternative MISRA compliant code as well as providing a cross-reference to the rule definition.



Rule Explanation



Conformance Chart

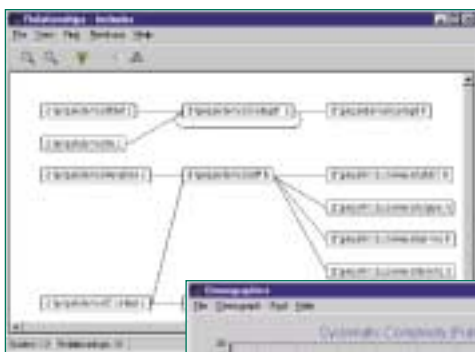
Features of QAC MISRA Compliance Module

- Detects and reports non-MISRA compliant code
- Links warning messages directly with the source code and the appropriate MISRA rule
- Provides cross references via further HTML links to the appropriate rule definition and explanatory examples
- Produces code quality reports detailing the number and type of violations that occurred in each file whilst linking them to the appropriate part of the source code
- Generates textual and graphical software metric reports that highlight code testability, maintainability and portability
- Draws code visualisation diagrams that enhance source code comprehension and simplify the review process
- Integrates with configuration management tools
- Allows users to tailor or add checks appropriate to individual company standards or conventions

QAC MISRA Compliance Module

Deep Flow Static Analyser

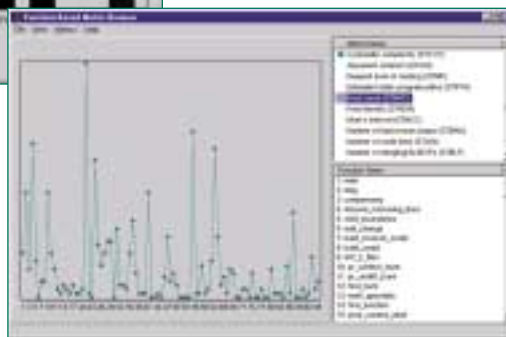
Detects language implementation errors, inconsistencies, obsolescent features and MISRA Guidelines' transgressions quickly and efficiently, avoiding delays at a later and more expensive stage of the development cycle. QAC MISRA Compliance Module combines industry-standard analysis metrics with easy-to-understand reports.



Relationship Tree



Demographics



Complexity Matrix

Benefits of QAC MISRA Compliance Module

- Ensures all code complies with statically enforceable MISRA Rules
- Allows tailoring and extension of the rules to meet local requirements
- Educates developers with regard to "safe" language usage and MISRA C
- Offers an automatic, repeatable and efficient code verification method
- Establishes a software quality benchmark against which subsequent revisions of code can be measured and compared
- Enhances source code comprehension
- Improves software testability and maintainability
- Improves code portability
- Prevents coding and implementation errors from reaching the software testing phase
- Identifies software issues that may not otherwise be identified
- Reduces software development time and cost
- Increases software quality
- Supports software validation, software process maturity and various quality initiatives such as the Capability Maturity Model (CMM), ISO9003/EN 29003, TickIT, IEC 61508, Def Stan 00-55 and DO-178B

QAC MISRA Compliance Module

Increases Productivity and Quality

Whether the nature of your software is safety-critical, industrial, commercial or educational, QAC will provide a unique enhancement to the productivity and quality of your development process.

QAC MISRA Compliance Module

Enables Automated Adherence to MISRA Guidelines

Provides your developers with a fully automated environment in which to implement the MISRA Standards and further quality procedures by seamlessly integrating QAC MISRA Compliance Module into your software process.

QAC MISRA Compliance Module

Provides Immediate and Future Savings

Provides the ability to limit complexity and develop testable code. This reduces the risk of code black-spots that can lead to high maintenance costs.

Platforms Support

- Solaris, HPUX™, Linux, Windows NT™, Windows®95, 98 & 2000 (for other platforms contact Programming Research Ltd.)

Minimum Storage Requirement

- 20MB of free hard disk space

Documentation

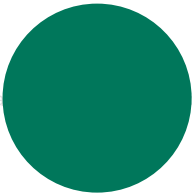
- Installation & Release notes

Licensing

- Licensed with annual Support & Upgrade Service

Support

- Telephone Hotline
- E-mail support
- Upgrade Service
- User Training
- Consultancy



```
if (parind != #) { if (argv[parind] != "-") { parind++; if (first_nonpar != last_nonpar && last_nonpar != parind)
```

Products from Programming Research Ltd



Deep-flow static analysis tool for Windows®95, 98, 2000, NT™ & UNIX



Configuration Module for enforcing the MISRA guidelines using QAC®



Deep-flow static analysis tool for Windows®95, 98, 2000, NT™ & UNIX



Deep-flow static analysis tool for UNIX platforms

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