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PRESS RELEASE

Vector Software Announces Support for MISRA C: 2012

VectorCAST MISRA Compliance Helps Improve Safety, Enhances Use of C in Critical Systems

Providence, RI – 7/21/2014 - Vector Software, the world's leading provider of innovative software solutions for testing safety and mission critical embedded applications, announced today that the VectorCAST™ software test solution now supports the MISRA C: 2012 (MISRA C3) standard. The new benchmark offers improvements to earlier versions, and extends support for the MISRA C: 2012 C99 version of the C language (ISO/IEC 9899:1999).

The VectorCAST software test environment is widely deployed in safety-critical applications that utilize the MISRA C standard, and the regulation is the most widely used set of coding guidelines for C language development. VectorCAST/Lint utilizes the powerful Lint source code analysis engine from Gimpel Software, and is configured for checking the MISRA C standard. These standards recommend the use of a restricted subset of constructs for the C and C++ languages, with the goal being a safer and more maintainable use of the language. The VectorCAST/Lint tool supports MISRA regulations with these features:

- An easy-to-use GUI
- Support for MISRA C and C++
- Customizable reporting

Support for MISRA C: 2012 is part of Gimpel Software's ongoing commitment to embedded development and safety critical applications. Support for the standard was originally included in PC-lint and FlexeLint in 2001 and since then has been expanded to include newer versions of MISRA C and support for MISRA C++. The implementation of MISRA C: 2012 allows fine-grained control on a per-rule basis. This allows organizations to not only selectively choose which rules are enforced, but also to easily specify exceptions to individual rules for specific symbols, functions, macros, and arbitrary code regions to reflect the deviations employed on a particular project.

MISRA C: 2012 includes a number of improvements that help reduce the cost and complexity of compliance, while offering enhancements that assist in the consistent and safe use of C in safety-critical systems. MISRA C: 2012 includes support for C99 — a version of the C language that was not widely implemented when MISRA C: 2004 (MISRA C2) was published — and adheres to guidelines for C90. Originally developed for automotive applications, MISRA is now broadly adopted for aerospace, defense, medical and industrial control applications. The latest MISRA C standard includes additional rules, plus a number of improvements that promote the understanding and use of the guidelines. Based on MISRA C2 user experience, they include:

- Clarifying ambiguity to ensure consistent interpretation of MISRA rules
- Categorizing rules as either "mandatory", "required" or "advisory"
- Defining "decidability" better, and explaining the degree to which the enforcement of a rule is guaranteed

"Vector Software is deeply committed to our automotive customers, and furthering the MISRA organization's goal of promoting the safe use of the C development language", said Bill McCaffrey, Chief Operating Officer, Vector Software. "The VectorCAST test environment is now MISRA C: 2012 compliant, enabling developers to use an

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automated tool to analyze their code to ensure that it meets the standard, thereby improving their overall software quality."

About Vector Software, Inc.

Vector Software is the world's leading provider of software testing solutions for safety and business critical embedded applications. Companies worldwide in automotive, aerospace, medical devices, industrial controls, rail, and other business critical sectors rely on Vector Software's VectorCAST™. By automating and managing the complex tasks associated with unit, integration, and system-level testing, VectorCAST helps organizations accelerate development and ensure the reliability of their embedded software applications. Founded in 1989 by embedded software engineers, Vector Software is headquartered in East Greenwich, Rhode Island USA with offices worldwide and a world-class team of support and technology partners. To learn more, visit: www.vectorcast.com. Follow Vector Software on [Facebook](#), [Google+](#), [LinkedIn](#), [Twitter](#), and [YouTube](#).

About Gimpel Software

With 30 years of experience serving the C and C++ communities, Gimpel Software is a globally recognized leader in static analysis. Gimpel's innovative and award-winning PC-lint and FlexeLint products are trusted by companies worldwide to improve productivity and lower costs by finding bugs, inconsistencies, and coding standard deviations, and providing deep insight into projects early in the development life-cycle. PC-lint and FlexeLint are used across numerous industries, providing support for hundreds of diverse compilers and environments. Gimpel Software is headquartered in Collegeville, PA USA. To learn more, including specific features provided by our products or to try out FlexeLint on our interactive demo, please visit www.gimpel.com.