

IAR unveils Functional Safety version of IAR Embedded Workbench for Arm equipped with certified static analysis capabilities

Uppsala, Sweden, February 20, 2024 – IAR, the world's leading provider of software solutions for embedded systems development, is proud to announce the release of the latest version 9.50.3 of its flagship IAR Embedded Workbench for Arm, Functional Safety edition. This release strengthens IAR' s commitment to supporting developers in creating safe, secure, and compliant embedded applications across a wide range of industries, including automotive, medical devices, industrial automation, and consumer electronics. The most important new feature in this release is the availability of the certified version of C-STAT, the static code analysis tool certified for safetycritical applications.

The latest IAR Embedded Workbench for Arm, Functional Safety Edition, complies with the specifications of the C++17 standard and adds new Arm core support for Cortex-M55, Cortex-M85, Cortex-R52+, Cortex-R82, Cortex-A32, enabling validated compliance with key functional safety standards such as IEC 61508, ISO 26262, and IEC 62304. It integrates powerful code analysis tools, IAR C-STAT for static analysis and IAR C-RUN for runtime analysis, to enhance software reliability and adherence to coding standards like MISRA C, CERT C, and CWE.

Certified by TÜV SÜD, the C-STAT tool is now also available as a certified version. The certified edition serves a critical role in helping developers maintain adherence to safety standards by performing thorough static analysis. It can detect a wide range of potential issues, including code vulnerabilities and deviations from coding standards such as MISRA C and CERT C. This proactive detection is crucial in avoiding costly and time-consuming fixes late in the development cycle, thus enhancing overall reliability and accelerating market introduction.

Bill Lamie, Founder and CEO at PX5 RTOS and previously CEO/Co-Founder of ThreadX/Microsoft Azure RTOS, highlighted the critical role of IAR's C-STAT in IAR's latest Functional Safety version: "The IAR C-STAT plays a crucial role in ensuring compliance with safety standards. We relied on C-STAT for our PX5 RTOS code base review. It was an extremely valuable tool, like having AI quickly review your code. The synergy between IAR's certified toolchain and our Advanced Real-Time Operating System offers unparalleled value to developers. I can't imagine building a product without it!"

The IAR solution supports modern development practices, including Continuous Integration (CI) and automated builds, catering to the needs of today's fast-paced development cycles. With support for scalable build server topologies across various platforms, such as Linux (Ubuntu and Red Hat) and Windows, the toolchain integrates seamlessly into existing development environments.

Anders Holmberg, CTO of IAR, remarked, "Our newest release of the IAR Embedded Workbench for Arm, Functional Safety, is tailored to accelerate innovation by integrating static code analysis seamlessly into CI-based workflows, offering developers and teams an extra layer of confidence to automate and satisfy functional safety standards. The certified edition includes the IAR C-STAT Compliance Report, which provides valuable information on supported standards and covered rules to further assist developers in ensuring compliance and reliability of their applications."



Further information on the certified IAR Embedded Workbench for Arm, Functional Safety, and all other IAR solutions for the development of safety-relevant applications at <u>https://www.iar.com</u>/products/requirements/functional-safety/.

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About IAR

IAR provides world-leading software and services for embedded development, enabling companies worldwide to create secure and innovative products for today and tomorrow. Since 1983, IAR's solutions have ensured quality, security, reliability, and efficiency in developing over one million embedded applications for companies across industries such as industrial automation, IoT, automotive and medical. IAR supports 15,000 devices from over 70 semiconductor partners. The company is headquartered in Uppsala, Sweden, and has sales and support offices worldwide. IAR is owned by I.A.R. Systems Group AB, listed on NASDAQ OMX Stockholm, Mid Cap (ticker symbol: IAR B). To learn more, visit www.iar.com.

Editor's Note: IAR, IAR Embedded Workbench, Embedded Trust, Embedded Secure IP, C-Trust, C-SPY, C-RUN, C-STAT, IAR Visual State, I-jet, I-jet Trace, IAR Academy, IAR, and the logotype of IAR are trademarks or registered trademarks owned by IAR Systems AB. All other product names are trademarks of their respective owners.

Image Attachments

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Attachments

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