Wind River System Simulation (Intel Simics 7) 25.09 Release Overview

This release is focused on the aerospace and defense market. It adds support for new Arm CPUs, new virtual target boards, and Microsoft Visual Studio Code extensions for Intel Simics modeling.

Wind River system simulation consists of software tools and services to benefit DevSecOps. It includes support for the Intel® Simics® simulator and virtual platform models, with the commercial quality required for complex deployments in highly regulated markets. The 25.09 release supports the latest Intel Simics 7 enhancements as well as support for new CPUs and new target boards.

This release adds incremental features in the following areas:

- New Arm® CPUs support
- New support for virtual target boards for VxWorks® and Wind River® Helix™ Virtualization Platform
- Microsoft Visual Studio Code extensions for Simics modeling

NEW ARM CPUS SUPPORT

This Wind River system simulation release adds support for Armv8-M Cortex-M33 and Armv8-A Cortex-A78AE, which enables shift-left testing and more accurate virtualization features. These CPUs have capabilities tailored for aerospace and defense that enable high-fidelity simulation, deterministic testing, and real-time responsiveness — all of which are essential for the development and certification of mission-critical, safety-assured embedded systems.

NEW VIRTUAL TARGET BOARDS FOR VXWORKS AND HELIX PLATFORM SUPPORT

Wind River system simulation now supports Xilinx Versal (Armv8) VCK190 and Microchip PolarFire (RISC-V) virtual boards, expanding flexibility for embedded development. These platforms offer enhanced performance, improved simulation capabilities, and functional verification scalability, ideal for applications requiring heterogeneous compute and Wind River's robust real-time operating system (RTOS) integration.

VS CODE EXTENSIONS FOR SIMICS MODELING

Wind River system simulation now offers seamless Simics modeling in VS Code. Users can install the extension from VS Code marketplace, use the integrated DML language server for intelligent modeling support, and take advantage of built-in unit test runners and debuggers. This streamlines development workflows and simulation accuracy for complex embedded systems.

LEARN MORE

For more information about Wind River system simulation and Intel Simics, visit www.windriver.com/products/simics.

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