

DEVELOP: CI/CD**SPEED TESTING TO GET TRUE CI/CD IN EMBEDDED****THE CHALLENGE**

The revenue of a large network equipment manufacturer has shifted in the past three years from hardware-driven sales to income from the operating system and applications.

This year, for the first time, the software business accounted for more than 50% of total revenue, with a projected increase of 3% YoY becoming the growth engine, with significant margins. Focusing on accommodating this growth, the manufacturer discovered that the overall cost of testing and validating its software exceeds the cost of developing it.

Years ago, the company's R&D group started to embrace the concept of CI/CD to provide more frequent updates to customers. However, the company's heritage around hardware production processes is impacting the team's ability to automate and scale the testing infrastructure, preventing a real CI/CD workflow.

The embedded software that drives the differentiated functionalities of the company's products is based on a proprietary Linux build system and a set of customized user space packages, which makes testing and debugging a costly challenge when multiple versions of hardware are in use.

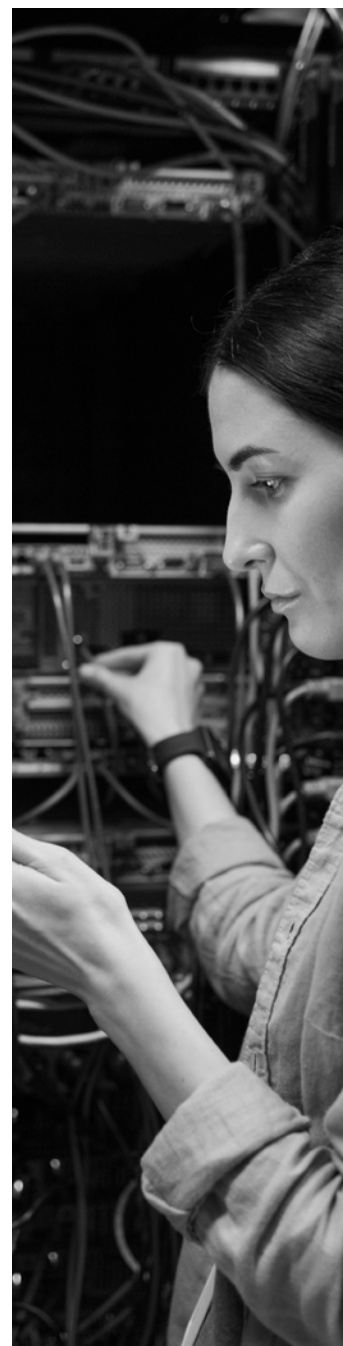
THE SOLUTION

Wind River® Studio's CI/CD environment enables DevSecOps methodologies for embedded software providers. It combines the built-in Studio Pipeline Manager with hardware simulation and target access under Studio Virtual Lab to enable test automation in a consolidated environment.

This allows the software team to run a significant portion of its testing on a combination of hardware and simulators. The team can scale the number of simulations that can run using cloud resources and leverage test automation tools built for embedded software testing.

THE RESULTS

With all the built-in capabilities of Studio, the company can enable embedded software test automation, ease the transition to a true DevSecOps environment, and enhance its software business with more frequent releases, better quality, and lower costs overall.

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