

Validate Earlier. Reproduce Failures Consistently. Preserve Scarce Hardware Capacity. ➡

Extend validation beyond the physical laboratory with configurable virtual targets, repeatable scenarios and enhanced diagnostic visibility.

Limited hardware availability, shared laboratory resources and lengthy integration cycles can delay engineering feedback and restrict validation throughput.

Bytecraft Virtual Platforms & Digital Twins enable earlier software execution and repeatable validation while complementing physical HIL and final system assurance.

KEY BENEFITS

Earlier Software Validation

Begin execution and validation before production hardware is broadly available.

Repeatable Test Environments

Execute identical scenarios without laboratory variability.

Better Hardware Utilisation

Reserve physical targets for activities that genuinely require them.

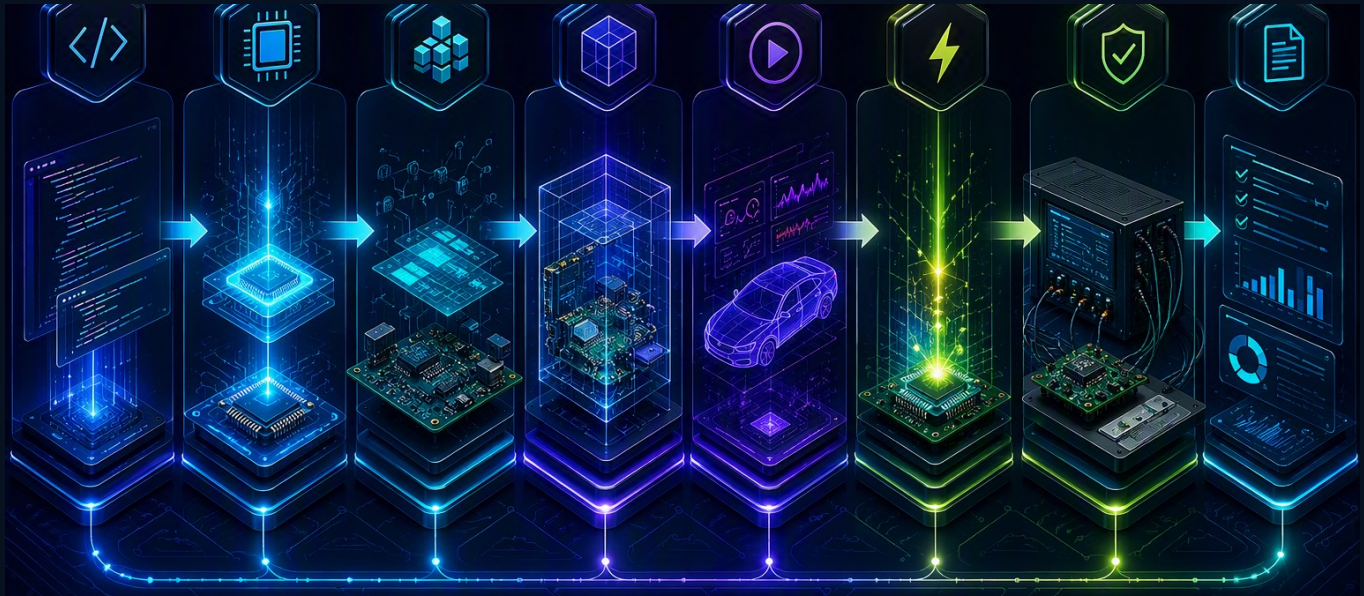
Faster Defect Reproduction

Use deterministic execution and replay to recreate failures.

VALIDATE EARLIER WITHOUT WAITING FOR HARDWARE AVAILABILITY.

EXPAND VALIDATION BEYOND THE PHYSICAL LAB

Virtual and physical environments work together to enable earlier execution, repeatable investigation and final assurance on real hardware.



ENGINEERING FLOW

01 Software Development

02 Virtual Platform

03 Digital Twin Environment

04 Scenario Validation

05 Fault Injection

06 Pre-HIL Qualification

07 Physical HIL Validation

08 Release Evidence

DESIGNED FOR

- Aerospace & Defence
- Railway Systems
- Automotive
- Semiconductor & FPGA Development
- Advanced Engineering Programmes

BUSINESS OUTCOMES

- Earlier engineering feedback
- Reduced dependence on scarce hardware
- Improved validation repeatability
- Faster root-cause investigation
- Increased development parallelism

VIRTUAL + PHYSICAL | Move appropriate validation earlier while preserving final verification on real hardware.