



WIND RIVER STUDIO DEVELOPER

A modern DevOps platform that accelerates development, deployment, and operation of mission-critical systems for the intelligent edge

Building software for mission-critical embedded systems is becoming increasingly complex. There is demand for more intelligence at the edge and a path toward software-defined autonomous systems. Requirements and mandates for safety and security compliance are increasingly time-consuming, resource intensive, and expensive. Accelerating innovation while also leveraging and supporting legacy assets, systems, and applications can be staggeringly difficult.

The secret to overcoming the ever-increasing complexity of embedded software development lies in leveraging advancements in agile software development. In addition to agile approaches such as CI/CD, modern software frameworks, and cloud-native deployment, strategies including virtualization and container technologies are driving improvements in efficiency and productivity. Thoughtful application of these technologies enables DevSecOps teams and embedded software developers to accelerate innovation and delivery while also maximizing the ROI on current projects or processes.

WIND RIVER STUDIO DEVELOPER: MODERNIZE WITHOUT COMPROMISE

Wind River® Studio Developer is crafted around cloud-native software development techniques that enable organizations to securely lower embedded software lifecycle costs, shorten time-to-market, and capture new revenue opportunities. Studio Developer can help software teams standardize development tooling and processes, increase automation and collaboration, test earlier and more often, and improve visibility between edge and cloud systems. It delivers unique business advantages in four key categories:

1. **Improved developer efficiency:** Increasing standardization, automation, collaboration, ease of use, and consistency, plus the reuse of resources, configurations, components, and code leads to lower development costs, faster time-to-market, higher productivity, and improved developer experience.
2. **Shift-left testing:** This is enabled through simulation to test earlier and at greater scale as well as automated testing supported by reusable testing components and consistent, programmatic access to both virtual and physical targets.
3. **Increased agility and innovation:** A flexible, extensible DevSecOps environment that can be secured end-to-end from the development environment to the edge can unlock new competitive advantages by leveraging cloud computing, scalability, and collaboration capabilities.
4. **Extended device lifetime value:** Real-time visibility into conditions and usage patterns in the field, analytics, and the ability to deliver updates over the air all address maintenance concerns and revenue opportunities while increasing the device's value over time.

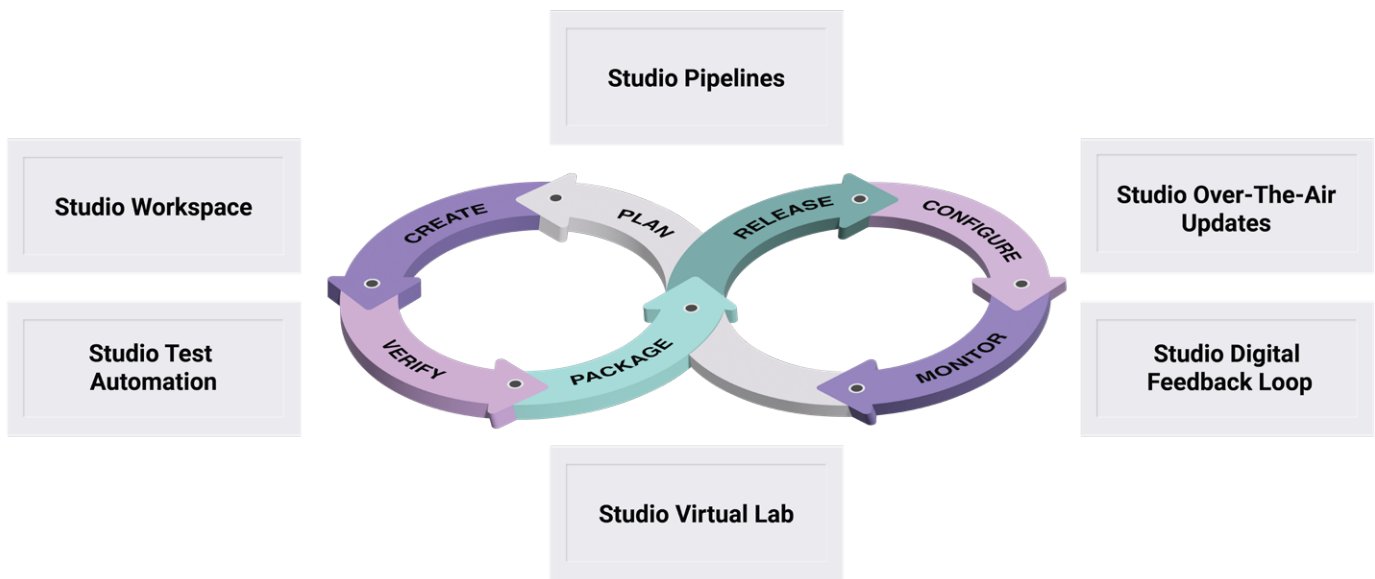


Figure 1. Studio Developer modules

SIX MODULES, ONE INTEGRATED SOLUTION

Studio Developer delivers its capabilities through six modules, each designed to streamline and enhance various aspects of embedded software development. An open, extensible, scalable, secure foundation improves collaboration and consistency throughout the application lifecycle, across geographically distributed teams and resources.

WIND RIVER STUDIO WORKSPACE

Studio Workspace enables instant, on-demand provisioning of preconfigured, customized development environments in your public or private cloud. It:

- Accelerates new developer time-to-value by eliminating manual configuration of workstations, tools, and resources
- Improves security by centralizing developer working directories, resources, and access controls inside your cloud environment
- Reduces costs and improves resilience by enabling developers to be productive from any machine, not just from powerful workstations

WIND RIVER STUDIO PIPELINES

Studio Pipelines enables automation and orchestration of continuous build, test, integration, and deployment processes. It can:

- Help organizations increase efficiency, reduce development costs, and accelerate time-to-market by automating and orchestrating the software workflows used to develop, test, deploy, and operate intelligent edge systems
- Facilitate seamless integration with popular embedded software tools as well as development teams' existing infrastructure to create high-performance, multistage pipelines

WIND RIVER STUDIO VIRTUAL LAB

Studio Virtual Lab manages manual and programmatic access to shared virtual and physical development devices. It offers:

- Uniform cloud-based management of and access to simulated and physical hardware resources to automate embedded testing and to maximize utilization of expensive development resources
- Accelerated development-and-release cycles through earlier, more frequent, and consistent testing
- Leveraging of teams' intellectual property by enabling the integration of existing models and physical test harnesses into the Studio Virtual Lab system

WIND RIVER STUDIO TEST AUTOMATION

Studio Test Automation standardizes and shares test suites and plans for systems, applications, and components. It:

- Improves testing consistency and reduces costs by centralizing tests and configurations, packaging common tests and testing plans for use across teams and projects
- Integrates with existing testing and reporting tools to meet the needs of modern development teams

WIND RIVER STUDIO OVER-THE-AIR UPDATES

Studio Over-the-Air Updates manages multitier update campaigns for over-the-air deployment to fielded devices.

It increases:

- Development agility by delivering updates to fielded devices and device lifetime by upgrading efficiency and capability in software
- Security through streamlined deployment of fixes, while reducing maintenance costs and risk of device recalls

WIND RIVER STUDIO DIGITAL FEEDBACK LOOP

Studio Digital Feedback Loop establishes reliable connectivity between edge and cloud systems for real-time data collection and analytics. It can:

- Increase development agility and velocity by establishing feedback loops between edge and cloud systems with flexible data pipelines and analytics
- Increase profitability and user satisfaction with real-time visibility into usage and conditions at the edge
- Reduce downtime and costs by proactively identifying maintenance and performance problems

ACCELERATE DIGITAL TRANSFORMATION ACROSS THE INTELLIGENT EDGE WITH WIND RIVER

Wind River is a trusted, proven partner with decades of experience and a comprehensive software and services portfolio to guide and support your development transformation journey.

Wind River Professional Services

The CMMI Level 3–rated Wind River Professional Services organization leverages years of system design and development expertise to work collaboratively with customer design and program teams. For more information, visit www.windriver.com/services.

Wind River Studio Developer Managed Services

Studio Developer is offered with a set of managed services that leverage the expertise and experience of the Wind River Professional Services team to accelerate the adoption and integration of Studio Developer, as well as to manage cloud infrastructure, operate the environment, and maintain the security of the development platform through updates and upgrades.

Wind River Customer Support

Studio Developer is backed by the award-winning Wind River global support organization, with multifaceted self-help options and optional premium services to provide the fastest possible time-to-resolution. For more information, visit www.windriver.com/services/customer-support.

Wind River Education Services

Wind River offers instructor-led, on-demand, and mentored learning, including our anytime, anywhere access to online subscription-based e-learning. For more information, visit www.windriver.com/studio/services/education.

Wind River Partner Ecosystem

Visit our partner ecosystem at www.windriver.com/partners for a full list of our partners and their products.

Schedule a live demo today to see how Studio Developer can help your software teams be more efficient, productive, and innovative. [Schedule Now >>](#)

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