WNDR/VR

Wind River Studio
Operator Capabilities

Integrated Cloud, Automation, and Analytics for the Intelligent 5G Edge

In order for 5G edge networks to introduce new personalized and adaptive services, they must first deliver the essential requirements of extremely low latency, high availability, security, and flexibility. Simultaneously, these networks must be extremely robust, resilient, and flexible. A distributed cloud architecture is a fundamental element in realizing the promise of 5G, where AI and automation processes that enable digital scale become the norm for successful CSPs across the globe.

Wind River® Studio includes integrated cloud platform, orchestration, and analytics capabilities so that operators can deploy and manage their 5G edge networks globally. It is the first in a series of user experiences from Wind River that will deliver an intelligent systems platform that constantly and dynamically adds new sets of capabilities, seamlessly deploying them where and when they are needed.

The core components of Studio operator capabilities include:

/ Cloud Platform

A production-grade distributed Kubernetes cloud platform for managing edge cloud infrastructure, based on the OpenStack StarlingX project. Studio compiles best-in-class open source technology to deploy and manage single node, multi-node, and distributed cloud networks.

/ Conductor

One platform to achieve complete end-to-end automation. Pick the applications you need from an app catalog, deploy them to a carrier grade cloud platform, and orchestrate the resources needed for the applications — simply, intuitively, and logically. Scale from a handful of nodes to thousands of nodes in a geographically dispersed distributed environment.

/ Analytics

Effective management of a distributed cloud system by consuming and processing data through machine-learning algorithms to produce meaningful insights for decision-making. With full stack monitoring of the cloud infrastructure cluster and services, Studio collects, analyzes, and visualizes cloud behavioral data so you can keep your cloud up and optimized while reducing operational costs.

KEY BENEFITS

Provide the means for your customers to thrive in the digital economy:

- Automate the introduction of new revenue-generating services.
- Connect the unconnected, attract new categories of customers, and drive value from those connections.
- Scale volume and digital services: Service rollout can, and will, happen in minutes rather than months.
- Deliver new and enhanced experiences enabled by 5G.
- Balance growth and next-gen initiatives while maintaining performance and reliability of legacy systems.
- Manage costs and drive efficiencies while exceeding rising customer expectations.
- Keep your network up-to-date and secure without network outages.
- Scale your operations effectiveness and get insight into the future state of your network without adding more staff.

CARRIER SUPPORT

Wind River Studio is backed by our award-winning global support organization. We offer live help in multiple time zones with 24/7/365 emergency recovery and service restoration and standard Tier 1 and 2 break/fix support. The online Wind River Support Network with multifaceted self-help options and optional premium services provides developers the fastest possible time-to-resolution.

For more information, visit www.windriver.com/support.

KEY FEATURES

Studio sets the standard for high performance, high availability, and self-healing infrastructure. Cloud platform capabilities include:

- Ultra-low latency with deterministic performance
- High availability with zero down-time for applications
- Scalability from one to many nodes from edge to core
- Fully integrated security by design
- Simplified Day 1 and Day 2 operations through zero-touch provisioning (ZTP) and single-pane-of-glass host-level management
- Automatic workload migration

Studio analytics integrate data collection, monitoring, analysis, and reporting to optimize your distributed network operation. You can:

- Collect a broad and deep data set tailored for your needs
- Aggregate both structured and unstructured data, including logs and metrics
- Benefit from processing and storage, including replication indexing
- Derive powerful insights as analysis puts the data to use
- Receive proactive alerts and comprehensive reports

Studio sets the foundation for automated, software-driven service delivery that helps keep costs under control while enabling provisioning in minutes versus weeks, with:

- Managed complex topology
- Program service creation across multiple sites
- App catalog with drag-and-drop service creation
- Automatic deployment across thousands of sites
- Deployment across clouds, sub-clouds, and private and public networks

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