



Wind River Studio Operator

An on-premises, private cloud for virtualized and containerized applications

To meet users' changing requirements, operators must be able to efficiently deploy personalized and adaptive services on their enterprise and edge networks. A private cloud can enable that approach, providing low latency, automation, high availability, security, scalability, and flexibility.

Wind River® Studio Operator is a flexible and cost-effective platform that gives private cloud operators the tools they need to deploy and manage their cloud infrastructure globally, running operational and IT functions on the same geo-distributed network. Its integrated cloud platform, automated orchestration, and analytics features empower organizations to confidently optimize their cloud infrastructure and support deployment, orchestration, and management of both virtual machines (VMs) and containers from a single console.

Studio Operator has four key components:

/ Studio Cloud Platform

Take advantage of a fully cloud-native, distributed Kubernetes platform designed for architects building and deploying enterprise and edge cloud infrastructure. Based on the StarlingX open source project, Studio Cloud Platform simplifies the deployment and automation of single-node, multi-node, and distributed cloud networks for enterprise organizations.

/ Studio OpenStack

Leverage a containerized OpenStack control plane for VM infrastructure management that is a commercial, supported version of the OpenStack open source project. Enterprise and telecommunications organizations can deploy Studio OpenStack with Studio Cloud Platform, allowing private cloud operators to manage both container- and VM-based applications from a single management console and a unified technology stack.

/ Studio Conductor

Get complete management and automation features using a single console for a globally distributed network. Cloud planning and operations teams can select applications from an app catalog, deploy containers and VMs to a private cloud, and orchestrate resources with ease. Scale seamlessly from a few nodes to thousands.

/ Studio Analytics

Know what's going on with the cloud infrastructure and respond proactively. With full-stack monitoring of cloud infrastructure cluster and services, Studio Analytics collects, processes, analyzes, and visualizes cloud behavioral data. Enterprise organizations can manage distributed cloud systems through data consumption and processing, using machine-learning algorithms that produce meaningful insights for decision-making.

KEY BENEFITS

Businesses want a robust, high-performance private cloud infrastructure. Studio Operator gives them what they need to:

- Manage both VMs and containers from a single technology stack, from thousands of small-footprint edge sites to large clusters in enterprise data centers.
- Reduce dependence on public cloud infrastructure and the associated costs.
- Avoid vendor lock-in, using upstream-first, open source technology with community support and expertise .
- Leverage a high-performance, fully supported kernel and eliminate the need to separately license Linux for each cloud server deployment.
- Ensure high performance, low latency, and efficient resource allocation from core to edge systems, through the distributed architecture of Wind River Studio.
- Automate the introduction of revenue-generating services.
- Enable cloud-native networks with zero-touch deployment, minimizing complexity and reducing operational overhead and deployment hassles.
- Automate management of multiple sites from a single dashboard, including software updates, patches, and day-to-day operations.
- Achieve complete end-to-end automation and orchestration of infrastructure and application deployment, with the ability to scale to thousands of nodes in a geographically distributed environment.

KEY FEATURES

Studio Cloud Platform sets the standard for high-performance, high-availability, and self-healing cloud infrastructure, with:

- A production-grade Kubernetes cloud platform for managing single-node, multi-node, and distributed cloud or private cloud infrastructure
- A foundation based on the StarlingX open source project, part of the OpenInfra Foundation
- High-performance, ultra-low latency with deterministic performance
- High availability with zero downtime for applications
- Scalability from one node to thousands of nodes
- Suitability for enterprise, telecommunications edge, and core networks
- Support for flexible deployment configurations to optimize the use of hardware resources
- Fully integrated security by design
- Simplified Day 1 and Day 2 operations through zero-touch provisioning and single-console, host-level management
- Automated workload migration

Studio OpenStack deploys containerized OpenStack services to orchestrate and manage VMs. You can:

- Natively host the OpenStack control plane on a Kubernetes platform and easily perform installations and upgrades.
- Combine containerized deployment with Studio Cloud Platform's StarlingX management for a distributed architecture unique to the OpenStack world.
- Deploy OpenStack using a simple Helm chart and easily manage services as containers.
- Use a single management console and technology stack to deploy and manage legacy VMs and containers.

Enterprise and Carrier Support

Wind River Studio is backed by an award-winning global support organization that offers live help in multiple time zones, with 24/7 emergency recovery and service restoration and standard Tier 1 and Tier 2 break/fix support. The online Wind River Support Network, with multifaceted self-help options and optional premium services, provides developers fast time-to-resolution. For more information, visit www.windriver.com/support.



Studio Conductor sets a foundation for automated, software-driven service delivery that helps organizations control costs through:

- 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

Studio Analytics integrates data collection, monitoring, analysis, and reporting to optimize 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.