ROBIN

SOLUTION BRIEF

Cloud-Native Software-Defined Orchestration for Telco Service Delivery

Robin.io delivers hyper-automation for service delivery with 1-click application pipeline deployment, much lower infrastructure and operations cost, and facilitates a hybrid cloud strategy for all Telco applications.

Highlights

- **Define** & deploy applications stack or data pipeline as a bundle on Kubernetes on-prem or in the cloud
- **Enable** self-service provisioning and management capabilities for the entire stack
- **Accelerate** & enhance Dev/Test collaboration with application-aware cloning
- **Monitor** the health of infrastructure, containers, and the entire application stacks
- **Dynamically scale-up/ scale-out** in minutes, without interrupting application operations
- **Consolidate** multiple Databases like Oracle RAC clusters to reduce hardware and licensing cost
- **Migrate** your customized and legacy application stacks to Telco cloud without refactoring
- **Protect** your critical application stack with application aware snapshots and backup

ROBIN Telco Platform is a single tool to deploy and manage the scale and performance of the entire Telco app stack. ROBIN reduces the cost of operations & brings increased efficiency for the deployed infrastructure

Digital Transformation Demands Fast-paced Innovation

Operators need to be able to add intelligence, quickly adapt the software for different services and automate to rapidly scale the network with the most efficient utilization of the hardware. At the same time, these networks must be robust & resilient.

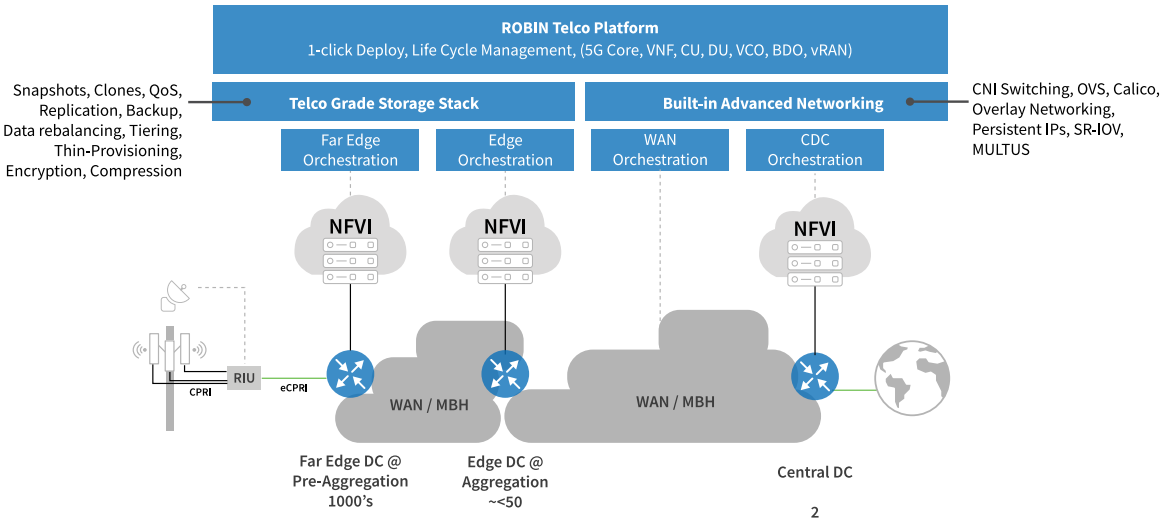
The ROBIN Telco Platform includes an application-aware automation fabric with built-in application-aware high-performance Storage, ultra-high-speed networking and Data Management features to support the demands of the new applications for IoT and Wireless providers.

Multiple ROBIN innovations for Telco

- **Compute** - NUMA awareness, improved performance, higher IO performance, workload isolation
- **Network Data Path** - Multiple network interfaces, high performance and speed networking, persistent IP addresses, dual-stack IPv4 and IPv6, improved utilization, lower cost
- **Data Services** - Deployment of any complex database, big data, time series, message queue service in minutes, policy-based auto-scaling, snapshot, backup, clone, containers and VMs on same Kubernetes platform, define and deploy end-to-end Telco stack from RAN and Core to OSS on containers
- **Advanced Placement and Resiliency** - Advanced affinity, anti-affinity, data locality, tenant isolation, auto healing, rapid failover and data resiliency
- **Automation** - Simplified provisioning and management, life-cycle management with always on availability, workflow upgrade, deployment of complex distributed app pipeline in minutes, pre/ post workflow hooks for extensibility
- **Visibility** - Cluster-wide events, health metrics, service mesh, observability framework

ROBIN Platform Enables “As-a-Service” Experience

ROBIN is a Software Platform for Automating Deployment, Scaling and Life Cycle Management of Enterprise Applications on Kubernetes. ROBIN automates the provisioning and day-2 operations so that you can deliver Telco stack and the associated services with 1-click deployment simplicity and enable hyper-automation and operational efficiency for hundreds of software components from any provider.



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Solution Benefits and Business Impact

ROBIN brings the agility, scale, and portability of cloud-native architecture to all your applications.

DELIVER SERVICES/FEATURES FASTER

Open RAN

RAN infrastructure is Telco's most vital asset. ROBIN enables carrier grade NFV platform Orchestration that is built on open source to be automatically deployed as a stack with simplified availability and scalability management for the software modules of the eNodeB in VNFs.

Provisioning Automation and Scalability

ROBIN understands applications and can intelligently automate the end-to-end provisioning process for entire application stacks and required components in a 1-click operation and takes only a few minutes.

Open High-Performance Networking

ROBIN has built support for open networking technologies to support high performance networking on X86 platform including INTEL Open Network Edge Services Software (OpenNESS) inside the ROBIN's deployed containers, With ROBIN, providers can deploy and operate Edge Services technologies including Kubernetes application platform optimized for VNF/CNF and Edge Applications/Services. ROBIN Networking also supports Rs-IOV and MULTIS to enable high speed low latency applications Telco stacks demand.

COST EFFECTIVE SERVICE DELIVERY

Developer Productivity

ROBIN allows application developers and content providers to on-board their own applications on containers on-premise or on the network edge, closer to the source of action. The platform allows for an integration of any stateful or stateless applications in a distributed development model for optimized delivery of function across the infrastructure.

Service providers can customize a pipeline of selected best of breed applications for each function and quickly deploy them across the entire network on demand.

Improve hardware utilization

ROBIN enables operators to add intelligence, quickly adapt the software for different services and automate to rapidly scale the network with the most efficient utilization of the hardware. ROBIN uses container technology, providing better performance/CPU and eliminating the virtualization performance penalty and licensing costs.

Scale on-demand

ROBIN can manage common software components that span technologies that include Ipv6, MULTIS, SR-IOV, LTE-Advanced, Gigabit LTE, Massive MIMO, Internet of Things, 5G NR, NFV, C-RAN, Coordinated multipoint and others

Simplify life-cycle operations

ROBIN enables upgrades of individual components and the entire stack in a non-disruptive cost-effective manner without impacting the operations. ROBIN's application aware data services allow for 1-click operations to provision, scale, snapshot, clone, backup, migrate for application stacks, reducing the administrative cost.

NETWORK AND SERVICES ORCHESTRATION

End-to-end orchestration

End-to-end orchestration of micro services and legacy apps is a critical component in the optimization of resource utilization in virtualized networks. ROBIN allows containerized applications deployed in a stack together with data intensive legacy applications and managed as a single deployable and manageable stack.

Edge, data center and Telco cloud

Robin enables containerization and cloning of your entire application cluster, including data, for migration to the cloud of your choice.

No vendor lock-in

ROBIN Kubernetes-based architecture and standard X86 hardware gives operators complete control of selecting best of breed applications to support their evolving requirements. With the multi-cloud portability, and application selection flexibility you have the freedom to evolve your Telco applications and move them across any deployment models from the edge to the cloud.

High availability and self-healing

ROBIN provides application aware data protection and high availability and self-healing out of the box, eliminating the need for extra licenses and/or standby hardware. Rack- and data center aware data placement rules ensure your critical applications at all aspects of the service delivery stack from vRAN to Customer support and billing.

To learn more and to try ROBIN visit: robin.io