ROBIN

Solution Brief: Cloud-Native Financial Services Applications

Maximizing Performance and ROI for Cloud-Native Financial Services Applications

The Robin application automation platform enables financial institutions to automate deployment, scaling, and lifecycle management of enterprise applications. Robin simplifies the containerization of critical application pipelines, including fraud analytics, real-time risk detection, and deep learning environments composed of multiple stateless and stateful applications.

Digital Transformation Demands Fast-Paced Innovation

Digital transformation requires IT services to be delivered in a fast, agile, and streamlined manner across the entire organization. Financial services companies must constantly innovate to attract and retain customers who demand a rich digital and mobile experience. It is also critical to analyze security threats across diverse systems and applications in real time, meet all compliance requirements, and achieve continuous availability for critical applications.

The financial services industry is looking to containers and Kubernetes to achieve IT agility. However, there are many challenges that significantly impact the ability of technology leaders to innovate:

Infrastructure silos: Due to years of organic growth, the application infrastructure landscape is very diverse. Managing legacy applications and modern cloud-native applications at the same time can be challenging. With traditional methods, it can take weeks to provision legacy applications or provide dev/test refreshes. With release cycles shrinking due to DevOps culture and cloud-native architecture, developers need much faster turnaround times for their application pipelines that often include critical legacy applications.

High licensing and infrastructure costs: Creating dedicated clusters for individual "tenants" (teams, workloads, and applications) is necessary due to the challenges of performance isolation. Each cluster must be deployed for peak capacity, leading to overprovisioning and significant licensing and hardware costs.

Infrastructure lock-in: Migrating customized applications to the cloud is not easy. Being locked in to just a few infrastructure choices limits your ability to scale and experiment with new ideas.

Highlights

- Define and deploy application stacks or data pipelines as a bundle on-prem or in the cloud
- Enable self-service provisioning and management capabilities for the entire stack
- Accelerate and enhance dev/test collaboration with application-aware cloning
- Monitor the health of infrastructure, containers, and the entire application stack
- Dynamically scale-up/scale-out in minutes, without interrupting application operations
- Consolidate multiple databases, including Oracle RAC clusters, to reduce hardware and licensing costs
- Migrate customized and legacy application stacks to the cloud without refactoring
- Protect critical application stacks with application-aware snapshots and backup

The Robin platform manages all of the applications in your financial stack including Oracle RAC, MongoDB, PostgreSQL, ELK, HDP, Splunk, CDH, and custom apps and pipelines.

Solution Benefits and Business Impact

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

Deliver Products and Features Faster

Self-Service Experience

Robin provides self-service provisioning and management capabilities to developers, DBAs, and data scientists, significantly improving their productivity. The Robin platform saves valuable time at each stage of the application lifecycle.

Provision Application Stacks in Minutes

Robin automates the end-to-end database provisioning process for application stacks and pipelines. With Robin, provisioning is a one-click operation and takes only a few minutes.

Agile Dev/Test Refreshes

Robin application-aware clones can instantiate application pipelines with one-click, and shared among development, QA, and operations teams. Getting a dev/test refresh from a production database only takes a few minutes and is completely self-service. Moreover, Robin's copy-on-write cloning method significantly reduces storage requirements.

Scale On-Demand

With Robin, there is no need to create IT tickets and wait for days to scale-up database servers by adding more memory, CPU, or storage, or to scale-out by adding more nodes to your distributed applications. One-click scale-up and scale-out will enable you to cut response time to a few minutes.

Reduce Costs

Improve Hardware Utilization

Robin delivers much higher utilization and performance from your hardware investments, and enables performance isolation IOPS service-level control for guaranteed QoS. Robin also provides role-based access controls (RBAC) to consolidate multiple applications and data pipelines without compromising SLAs, resulting in lower hardware costs.

Reduce Licensing Costs

Robin leverages containers and Kubernetes to provide higher CPU performance and eliminate VM performance penalties and licensing costs. The ability to quickly scale on demand also means you don't need to overprovision CPUs. As a result, you can reduce your software licensing costs.

Simplify Lifecycle Operations

Native integration for Kubernetes, storage, network, and application management layers enables one-click operations to provision, scale, snapshot, clone, back up, and migrate application stacks, reducing administrative costs.

High Availability and Self-Healing

Robin provides high availability and self-healing out of the box, eliminating the need for extra licenses and standby hardware. Rack-aware data placement rules ensure your HA setup is production-ready.

Future-Proof Your Enterprise

Standardize on Kubernetes

Robin automates data and application infrastructure using cloud-native technologies, including Kubernetes and containers. Robin solves the storage and network persistence challenges in Kubernetes to enable its use for the provisioning, management, high availability, and fault tolerance of mission-critical applications.

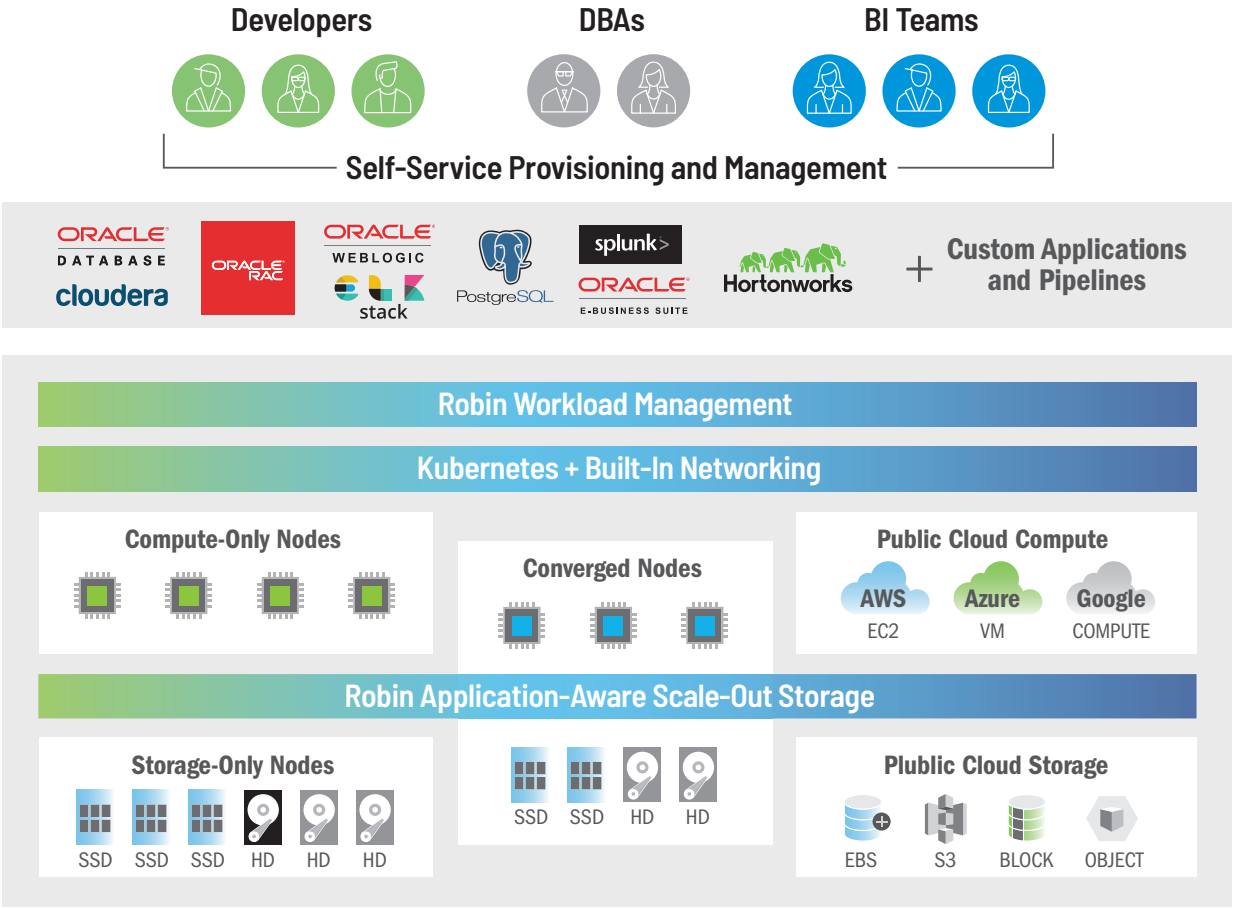
Migrate to the Public Cloud

Robin provides easy cloud migration for data pipelines, as well as customized multi-tiered applications. Simply containerize and clone your entire application cluster including data, and migrate it to the public cloud of your choice.

Eliminate Vendor Lock-In

Robin's Kubernetes-based architecture gives you complete control of your infrastructure. With multi-cloud portability, you have the freedom to move your workloads across public and private clouds, avoiding vendor lock-in.

The Robin Platform Enables an “as a Service” Experience



The Robin application automation platform enables enterprises to deploy complex data- and network-centric application pipelines on Kubernetes. Robin automates provisioning and day-two operations so you can deliver a self-service experience with the simplicity of one-click deployment.

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