Oracle-as-a-Service with Kubernetes

Modernize your Oracle infrastructure using cloud-native architecture. Improve the agility and efficiency of your Developers, DBAs, and BI teams.

Highlights

» **Provision** Oracle databases, including Oracle RAC clusters, on Kubernetes in minutes

» **Provide** self-service experience to improve developer and DBA productivity

» **Clone and share** databases and applications among Dev, QA, and Prod teams within minutes

» **Actively synchronize** Production and Dev/Test databases without impacting performance

» **Time-travel** to point-in-time application states using snapshots

» **Scale-up/scale-out** dynamically in minutes, without interrupting database operations

» **Migrate** your customized Oracle databases and EBS applications to cloud without refactoring

» **Consolidate** multiple Oracle RAC clusters to reduce hardware and licensing cost

Top 5 Challenges for Oracle Management

» **DevOps culture demands faster provisioning and Dev/Test refreshes:** Traditional methods of creating IT tickets take weeks to provision new databases or to provide dev/test refreshes of production databases. With release cycles shrinking, developers need much faster turnaround times.

» **Dynamic scaling to meet sudden demands:** If a Database Server runs out of resources, there is no easy way to scale-up the node "on-the-fly" by adding more memory or CPU. Scaling-out Oracle RAC clusters can also take weeks due to process delays.

» **Massive licensing and hardware costs:** Creating dedicated clusters for individual "tenants" (teams, workloads, applications etc.) is required due to challenges with performance isolation. Each cluster is deployed for peak capacity, leading to significant licensing and hardware costs.

» **Cloud migration:** Migrating Oracle databases and customized applications (e.g. EBS) to cloud is not easy. Lift-and-shift is the easier approach but does not bring the benefits of cloud-native architecture, and refactoring applications to make them cloud-native is expensive and time-consuming.

» **High availability and auto-failover:** Oracle RAC licenses and additional hardware is needed for HA, adding to already high costs.

ROBIN Hyper-converged Kubernetes Platform

» ROBIN Hyper-converged Kubernetes platform extends Kubernetes with built-in storage, networking, and application management to deliver a production-ready solution for the Oracle. ROBIN automates the provisioning and management of Oracle databases so that you can deliver an "as-a-service" experience with 1-click simplicity to developers, DBAs, and BI teams.

ROBIN Hyper-Converged Kubernetes Platform
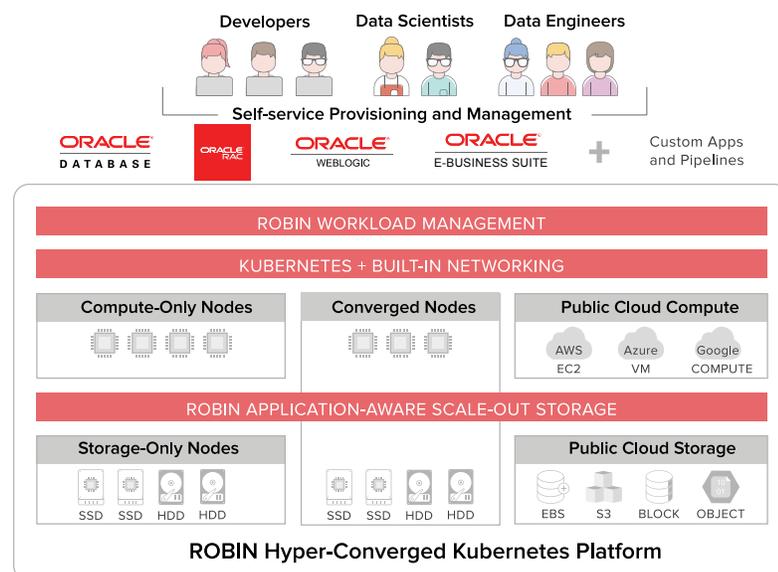
Solution Benefits and Business Impact

ROBIN brings together the simplicity of hyper-convergence and the agility of Kubernetes.

Self-service experience

ROBIN provides self-service provisioning and management capabilities to developers, DBAs, and BI teams, significantly improving their productivity. It saves valuable time at each stage of application lifecycle.

Provision databases in minutes

ROBIN has automated the end-to-end database provisioning process for the Oracle, including Oracle RAC. The entire provisioning process is a 1-click operation and takes only a few minutes.

Agile Dev/Test refreshes

You can clone databases with 1-click and share 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, the ROBIN's copy-on-write cloning method significantly reduces storage requirements. ROBIN's unique "TestMaster" utility also keeps Prod and Dev/Test copies in sync without causing any performance impact on Production databases.

Scale on-demand

No need to create IT tickets and wait for days to scale-up Database Servers by adding more memory, CPU, or Storage, or to sale-out by adding more nodes to Oracle RAC. Cut the response time to few minutes with 1-click scale-up and scale-out.

Improve hardware utilization

ROBIN provides performance isolation with min/max IOPS control for guaranteed QoS, and role-based access controls (RBAC) to consolidate multiple Oracle workloads without compromising SLAs, reducing hardware cost.

Reduce licensing costs

ROBIN uses container technology, providing better performance/CPU and eliminating the VM performance penalty. The ability to scale as you need also means you don't overprovision CPUs. As a result, you reduce Oracle licensing costs.

Simplify lifecycle operations

Native integration between Kubernetes, storage, network, and application management layer enables 1-click operations to provision, scale, snapshot, clone, backup, migrate for Oracle databases and applications, reducing the administrative cost.

Standardize on Kubernetes

Modernize your data infrastructure using cloud-native technologies such as Kubernetes and Docker. ROBIN solves the storage and network persistency challenges in Kubernetes to enable its use in the provisioning, management, high availability and fault tolerance of mission critical Oracle deployments.

Migrate to public cloud

ROBIN provides easy cloud migration for Oracle databases as well as customized multi-tiered Oracle applications such as EBS. Simply containerize and clone your entire application cluster, including data, and migrate to the public cloud of your choice.

No vendor lock-in

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

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