ROBIN

2016

FORTUNE 500 FINANCIAL SERVICES
CASE STUDY

Leading Fortune 500 Financial Services Company Validates Robin Enterprise Containerization Platform

INDUSTRY

Finance

- Largest Bank
- Largest Home owners insurance
- Largest Auto insurance provider
- Largest Credit Card provider

KEY CHALLENGES

- Delayed provisioning
- Underutilized Hardware
- Unsustainable storage growth
- Performance & Agility

BUSINESS BENEFITS WITH ROBIN

- 20% performance again over previously virtualized environment
- Reduced hardware costs
- Operational simplicity and agility

BUSINESS CHALLENGES

Serving millions of customers with over 75 billions in assets under management, this Fortune 500 financial services company is America's largest homeowners and auto insurance company. With a full range of financial products and services, this financial services company uses technology platforms and solutions to enable customers to be able to access their services any way they like including telephone, Internet, mail, fax, any bank's ATM machines as well as mobile devices. As a result, they maintain an IT Infrastructure that processes petabytes of data, and have moved their Data Center architecture from hardware defined to software defined in order to enable business agility.

The company processes billions of security events a day and leverages the Elasticsearch, Logstash and Kibana (ELK) stack for event aggregation, monitoring and visualization.

Strict processing and data retention requirements necessitated the use of dedicated virtual machines for this environment. However, that led to hardware underutilization, cluster sprawl, and unsustainable storage growth leading to excessive capital spend. As a technology pioneer that has always been at the forefront of adopting cutting edge solutions, this financial services company was drawn towards containerization as a lightweight, zero-performance-impact alternative to traditional virtualization for specific big data applications.

ROBIN ENTERPRISE CONTAINERIZATION PLATFORM

Robin Enterprise Containerization Platform heralds the era of application-centric IT by making servers, VMs, and storage boundaries invisible. Robin software transforms commodity hardware into a compute, storage, and data continuum such that multiple applications can be deployed per machine. Robin's app-to-spindle QoS guarantee maximizes application performance and helps deliver predictable user experience. This makes Robin the ONLY product in the industry that can consolidate even most demanding enterprise applications - such as databases and Big Data clusters- without compromising performance or predictability.

First, Robin's container-based Virtual Cluster technology enables clusters to be consolidated on shared hardware and dramatically accelerates application deployment. Even the most complex distributed applications, such as Hadoop or NoSQL, can be deployed within a matter of minutes.

Second, Robin application-aware, scale-out storage improves data protection and makes applications fault tolerant. By decoupling compute from storage, Robin platform not only protects applications from server failures, it also enables them to move around without copying or moving data.

Finally, Robin's application-driven data management capability enables data sharing across clusters thereby eliminating unnecessary data duplication. This allows quick application/cluster cloning regardless of the data volume.

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ROBIN AT LEADING FORTUNE 500 FINANCIAL SERVICES COMPANY

Performance

Robin containerization platform, running on bare metal commodity servers, provides a high performance environment for these applications with native IO latency and no performance overhead. This has helped improve the performance of Elasticsearch by 20% by eliminating the virtualization IO and performance overhead. The data ingest backlog is shorter and the queries return faster, thanks to Robin's compute side data acceleration layer.

Storage Efficiency and Cost Reduction

Robin has enabled this financial services company to use commodity storage hardware without compromising on data availability or protection. Robin uses erasure coding technique to strip data across multiple disks and nodes in a RAID6 like configuration. This ensures that application is resilient against storage node or disk failures. And by automatically recovering from failures, Robin ensures the highest level of data protection at a fraction of the cost. This has enables the finance giant to move away from expensive SAN arrays and realize significant cost savings.

Furthermore, Robin optimizes storage utilization by eliminating unnecessary application-level data replication. For instance, Elasticsearch enables shard-level replication by default which provides 1 replica copy of each shard located on a different node. An additional copy of data doubles their storage footprint. As Robin's scale-out storage layers already protects data against hardware failures, this financial services company was able to do away with Elasticsearch default 2-way data replication, which helped free up significant amount of storage capacity and create headroom for future growth.

Operational Simplicity and Agility

Robin was also able to dramatically accelerate new cluster deployments by reducing deployment time from weeks to minutes. Robin achieves this by eliminating the need to provision new machines each time a cluster is deployed and automating the entire infrastructure provisioning and application configuration process.