ROBIN

Case Study

Global Fortune 500 Financial Services Leader Gains Efficiency and Agility on Robin

Business Overview

With over 12 million customers and $125 billion in assets under management, this Fortune 500 financial services organization is America's leading homeowner and auto insurance company. Offering a full range of financial products and services to its constituents, this company uses technology platforms and solutions to enable its customers to access the services any way they like, including by telephone, Internet, mail, fax, any bank's ATM machines, and their own mobile devices. To provide this level of access and flexibility, the company maintains an IT Infrastructure that processes petabytes of data, and has moved its data center architecture from hardware-defined to software-defined in order to increase business agility.

This financial company processes billions of security events each day and leverages the Elasticsearch, Logstash, and Kibana (ELK) stack for event aggregation, monitoring, and visualization for cybersecurity threat detection. The company also operates an IBM Db2 data warehouse for business analytics and a Kafka cluster for stream processing.

Pain Points

- **Enormous hardware costs to run the applications**
- **Extremely complex procedures caused delays to provision**
- **The requirement to use separate virtual machines for each ELK stack**
- **VMAX all-flash arrays needed to meet strict SLAs and data protection requirements**
- **Underutilized hardware, cluster sprawl, and unsustainable storage growth**
- **Excessive capital spend**

Highlights

Industry

- Financial Services

Challenges Resolved

- Delayed provisioning
- Underutilized hardware
- Unsustainable storage growth
- Limited agility

Business Benefits

- Operational efficiency
- 20% performance gain
- Reduced CapEx
- DevOps agility

Financial Services Critical Requirements

High Performance: The Robin application automation platform, running on bare metal commodity servers, provides a high-performance environment for data-intensive applications with native IO latency and no performance overhead. The data ingest backlog for this financial institution is now 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 techniques to strip data across multiple disks and nodes in a RAID6-like configuration, ensuring that the application is resilient against storage node or disk failures. And by automatically recovering from failures, Robin provides the highest level of data protection at a fraction of the cost. This has enabled the finance giant to move away from expensive SAN arrays and helped them realize significant cost savings.

Elimination of Data Replication: Robin optimizes storage utilization by eliminating unnecessary application-level data replication. For instance, Elasticsearch enables shard-level replication by default, which provides one replica copy of each shard located on a different node. An additional copy of data doubles the storage footprint. As Robin's scale-out storage layer 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 a significant amount of storage capacity and create headroom for future growth.

Operational Simplicity and Agility: Robin was also able to dramatically reduce deployment times from weeks to hours, and application lifecycle management tasks from hours to minutes. Robin achieves this by eliminating the need to provision new machines each time a cluster is deployed and by automating the entire infrastructure provisioning and application configuration process. Developers at this financial services company can now use Robin's self-service features instead of creating IT tickets. Also, maintaining existing deployments has become simpler with Robin's one-click lifecycle management operations, including snapshot, clone, patch, and upgrade, making DevOps teams more efficient.

Lifecycle Management

Robin simplifies the use of container technology by providing a platform with built-in storage, networking, and application management to deliver a production-ready solution for managing containerized applications.

One-click manageability for the entire suite of stack applications: The Robin platform provides the ability to wrap the microservices in a single entity (called a "bundle") and provide an app store experience to developers. Developers can now deploy the entire application – with all its microservices – with a single click.

One-click scale-out and scale-up: Robin provides a self-service interface where developers can easily scale-out or scale-up individual microservices, without having to create IT tickets.

Performance monitoring: Robin provides a time-series analysis of real-time and historical performance and resource consumption of each microservice, making it easier to detect anomalies and set up alerts.

Benefits of the Robin Platform

Increased agility and developer productivity: Developers can now deploy and manage microservice-based applications using one-click operations. This saves valuable time for developers every day as they build new features and have to deploy and test the microservices multiple times.

Improved quality: WIth Robin, a single bundle describes and specifies the entire application, improving the quality system of this company. The platform also eliminates most of the differences between dev, QA, and production deployments, compared to traditional deployment methods.

Lower infrastructure costs: The ability to scale microservices on demand helps this leader avoid overprovisioning infrastructures. As a result, all hardware and software resources can be more effectively managed across dev, QA, staging, and production environments, resulting in a lower overall cost to the organization.

Higher customer satisfaction: The ability to set up alerts and detect anomalous behavior of a microservice helps this company fix application issues before they cause problems. The uninterrupted experience helps build trust with end users and leads to higher customer satisfaction.

The Robin Platform Simplifies Application

For more information visit robin.io or email info@robin.io

224 Airport Pkwy, Suite 600, San Jose CA 95110 USA
Tel: 408.216.0769

ROBIN