

ACCELERATING AEROSPIKE CLOUD DEPLOYMENTS

Highlights

Accelerated Cloud Deployments

Aerospike Cloud Foundations accelerates enterprise cloud deployments by empowering customers to build, manage and automate their own Aerospike database-as-a-service (DBaaS).

Standard Based Approach

Using Cloud Native Computing Foundation (CNCF) approved products allows Aerospike's customers to use the same orchestration and management models across various cloud environments.

Google Cloud first

The first release of Aerospike Cloud Foundations supports the Google Kubernetes Engine (GKE) on Google Cloud Platform (GCP). Support for other cloud platforms will follow.

Overview

With the unprecedented growth of large scale, data-intensive cloud applications, most companies are looking to deploy new databases or migrate their existing databases to the cloud. Unfortunately, complexities, cost and potential vendor lock-in make deploying databases in the cloud difficult. Aerospike's standards-based cloud strategy is designed to help customers minimize the complexity and cost of operating workloads in private, public, hybrid and multi-cloud environments. The first step in Aerospike's cloud strategy is to provide integrations with a set of standards based open source technologies compatible with all major cloud vendors as well as on-premises private clouds.

Aerospike Cloud Foundations for Google

The Aerospike Cloud Foundations is based on Cloud Native Computing Foundation (CNCF) standards which enterprises are rapidly adopting to help simplify the deployment, orchestration, management, alerting and monitoring of cloud applications across any cloud environment.

Aerospike Cloud Foundations components cover vital phases in cloud orchestration, management and monitoring. Helm charts allow the deployment of complex web applications or databases. Kubernetes operators provide a method of packaging, deploying and managing Kubernetes containerized applications. Prometheus provides a monitoring and alerting framework in cloud environments and Grafana can be used for creating graphical dashboards displaying this information.

Aerospike Cloud Foundations' initial release supports Google Kubernetes Engine (GKE) on Google Cloud Platform (GCP) and includes the following foundational components required for running an Aerospike DBaaS:

- **Kubernetes Operator:** Custom Aerospike-specific extensions to the Kubernetes API that encapsulate operations domain knowledge, such as scale-up, scale-down, cluster configuration management and upgrades.
- **Helm Charts:** Deployment of Aerospike clusters in a Kubernetes environment using the Helm package manager.
- **Prometheus:** Integration with the monitoring and alerting solution by way of a custom exporter for Aerospike Enterprise Edition and Alertmanager configurations.
- **Grafana:** Integration with Grafana Labs' open source visualization platform through custom dashboards for the Aerospike Enterprise Edition Prometheus exporter.
- Support for other Cloud platforms such as AWS, MS Azure and others will be available in the future.
- From a deployment perspective, Aerospike Cloud supports different scenarios such as hybrid cloud, private cloud/on-premise or pure cloud as it is shown in Figure 1.

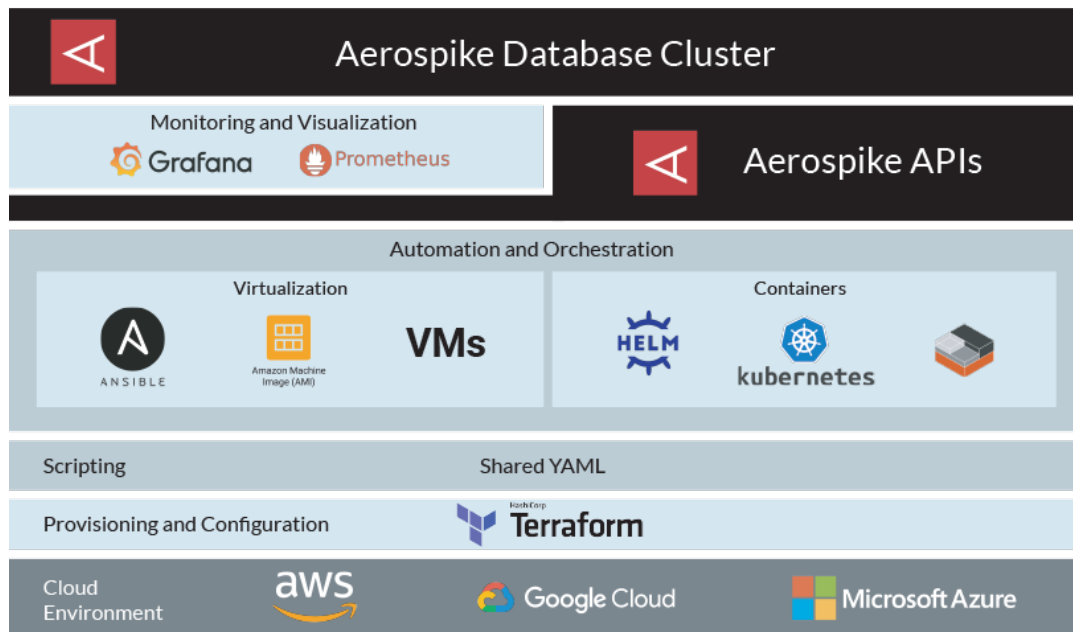


Figure 1: Aerospike Cloud Foundations

Benefits

Accelerated Cloud Deployments:

By utilizing Aerospike Cloud Foundations, customers can use the same standard tools across cloud environments to accelerate the development, management and automation of their own Aerospike database-as-a-service (DBaaS).

Standardization:

Aerospike Cloud Foundation is based on CNCF standards, which enterprises are rapidly adopting to simplify the deployment, orchestration, management, alerting and monitoring of cloud applications across any public or private cloud environment. The standard driven approach also ensures compatibility across various cloud environments.

Innovation and Competitive Advantage:

With its hardware optimized architecture, Aerospike provides significant savings compare other NoSQL technologies on-premise. These savings can now be realized in cloud deployments, and thus can finance further innovation.

Deployment Flexibility:

Aerospike Cloud Foundations gives customers the flexibility to easily deploy and manage Aerospike in any cloud environment. Though initially optimized for GCP and GKE environments, additional cloud platforms will be supported.

About Aerospike

Aerospike is the global leader in next-generation, real-time NoSQL data solutions for any scale. Aerospike enterprises overcome seemingly impossible data bottlenecks to compete and win with a fraction of the infrastructure complexity and cost of legacy NoSQL databases. Aerospike's patented Hybrid Memory Architecture™ delivers an unbreakable competitive advantage by unlocking the full potential of modern hardware, delivering previously unimaginable value from vast amounts of data at the edge, to the core and in the cloud. Aerospike empowers customers to instantly fight fraud; dramatically increase shopping cart size; deploy global digital payment networks; and deliver instant, one-to-one personalization for millions of customers. Aerospike customers include Airtel, Banca d'Italia, Nielsen, PayPal, Snap, Verizon Media and Wayfair. The company is headquartered in Mountain View, Calif., with additional locations in London; Bengaluru, India; and Tel Aviv, Israel.

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