AKAMAS

Autonomous Performance Optimization for the Cloud

Why Your Cloud Applications Need AI-Driven Tuning

Version 2.0

The Cloud Problem

Companies of all sizes are embracing the cloud in the search for cost savings, faster time to market and innovation. Leading vendors like AWS, Microsoft Azure or Google Cloud are offering compelling pay-as-you-go services, with unlimited scale, relieving cloud adopters from the burden of infrastructure management.

The value proposition is powerful, yet, the reality is different. Organizations soon realize that monthly bills are higher than expected, and moving applications to the cloud does not solve their performance problems. With the unprecedented elasticity and flexibility available in the cloud, why are cloud leaders failing to optimize cloud spend and performance?

Cloud customers spend more than they should

In the datacenter days, teams had just a handful of infrastructure choices when it comes to application deployments. With the cloud, customers can select the best infrastructure that fits their workloads. However, the range of options is overwhelming: more than 270 choices are available just for AWS Compute, with costs ranging from $3 to $20k per month. As a result, organizations simply stick to common choices and buy bigger capacity if performance suffers. Cloud cost optimization potential remains unexplored.

Cloud vendors offer zero performance insights

Cloud services have opaque performance dependencies that create hidden bottlenecks. In addition, comparing apples to apples across cloud vendors is hard, with application performance varying wildly, even with the same service specs. Many customers rely on recommendation tools made available by cloud vendors themselves, with recommendations simply based on past usage data and simulation models. They cannot predict performance under different cloud configurations.

True cloud optimization is highly time-consuming

The vast amount of cloud configurations available, and the lack of proper performance visibility of underlying infrastructure, make it hard for operations teams to get cloud performance under control and effectively optimize cloud assets. Organizations have resorted to time-consuming, trial-and-error processes to assess actual application performance and cost tradeoffs of cloud services. The problem becomes even more intractable when multiple cloud vendors need to be evaluated.

64%

Share of cloud users that say cost optimization is their #1 priority.

Source: Rightscale State of the Cloud Report 2019

270

Number of available AWS EC2 instance types as of 2019.

Source: AWS

6 weeks

Time required to optimize mission-critical cloud application.

Source: Leading fintech provider

Google Cloud

"Applying recommendations without proper assessment could result in unexpected changes, such as issues with system performance, poor reliability, or loss of required permissions."

Source: Google Cloud Recommender Product Overview

akamas.io • © 2020 Akamas • All Rights Reserved

Autonomous Performance Optimization

An AI-driven, automation-oriented platform gives cloud operations teams the solution they need to ensure applications run on optimal cloud configurations and that expected service performance goals are achieved at the lowest possible cost. Cloud users are freed from tedious and time-consuming trial-and-error optimization tasks. Instead, they can trust that their applications are always running on the best cloud service for their specific needs with the best possible configuration, ensuring that they achieve both their application performance and cost saving goals.

Get optimal cloud price-performance

An autonomous performance optimization platform automatically identifies the best cloud deployment options based on your goals - be it the cheapest setup, the one providing the highest application performance or the best tradeoff overall. The platform's AI navigates the complexity of hundreds of cloud configurations, including instance types and storage options, and delivers cloud users the best configuration for their cost and performance requirements.

Gain visibility into cloud vendors performance

As an experiment-based tool, the platform measures the true application performance of different cloud providers and configurations. With the power to automate application-level performance tests, the platform can identify the cheapest cloud configurations that meet specific throughput or latency requirements. Unlike vendor tools, automated, independent and cross-vendor performance optimization is the only way to substantially save costs and ensure complete performance visibility.

Automate and scale cloud optimization

Autonomous optimization uses machine-learning techniques to identify optimal cloud configurations in days instead of months, with no human intervention. Cloud users can automate the entire cloud optimization process, including provisioning of cloud environments, execution of application-level performance tests, evaluation of outcomes and deployment of optimal configurations. A multi-user platform can scale across development teams and applications.

With Autonomous Performance Optimization

-70%

Reduction in price-for-performance ratio on AWS EC2 and EBS.

+40%

Average improvement in cloud infrastructure performance KPIs.

5x

Increase in optimization process productivity by cloud team.

akamas.io • © 2020 Akamas • All Rights Reserved

Akamas

The Autonomous Performance Optimization Platform

Akamas is a new breed of performance optimization technology that helps enterprises, online businesses and SaaS vendors extract unprecedented levels of performance and cost savings from their technology stacks.

Built by veterans in performance engineering and data science, Akamas exploits advanced machine learning techniques to continuously optimize hundreds of interdependent IT configuration parameters.

Akamas is a company of Moviri, a global software and professional services group, and counts BMC Software, Dynatrace, HPE, Neotys and Splunk among its partners. Headquartered in Milan, Akamas has offices in Boston, Los Angeles and Singapore.

Powered by AI

Akamas uses machine learning to solve intractable optimization problems. By shrinking the target configuration space, it delivers massive performance and cost savings in hours instead of weeks.

Automated

Akamas radically outperforms trial-and-error manual optimization by using automation to iteratively design performance experiments, analyze outcomes and deploy settings.

Full-Stack

Akamas is a smart, technology-agnostic optimization platform that understands the interdependencies between operating system, middleware and application configurations.

Goal-Driven

Akamas discovers the best configuration tradeoffs that meet your performance goals. Availability. Throughput. Response time. Cost. You set the goal, Akamas figures out how to achieve it.

Learn more about the future of cloud optimization

For more information about how Akamas can help you optimize your cloud applications, visit akamas.io or contact us at info@akamas.io

Milan

Via Schiaffino,11
20158, Milan Italy

Boston

211 Congress Street
Boston, MA 02110

Los Angeles

12655 W. Jefferson Blvd
Los Angeles, CA 90066

Singapore

5 Temasek Boulevard
Singapore, 038985

AKAMAS

akamas.io • © 2020 Akamas • All Rights Reserved

All product names, logos and brands are property of their respective owners. All company product and services names used in this document are for identification purposes only. Use of these names, trademarks and brands does not imply endorsement.