

Kaminario for Hybrid Cloud



Working with Kaminario allowed us to consolidate several SQL licenses on to one server, leading to a 10x cost savings."

Slavek Rotkiewicz,
Owner,
TPG Software

Executive Summary

Cloud computing is an important tool for businesses, driving their digital transformation. However, moving to the public cloud (hybrid or multicloud) is a strategic decision that requires buy-in from key stakeholders, collaborative planning, and joint execution. According to Gartner, about 80% of organizations who use the public cloud use more than one public cloud provider. This may be driven by fear of vendor lock-in, the need for data redundancy, scalability, or unique cloud microservices. Regardless of the drivers, multicloud is likely to drive up costs and complexity and be more difficult to manage.

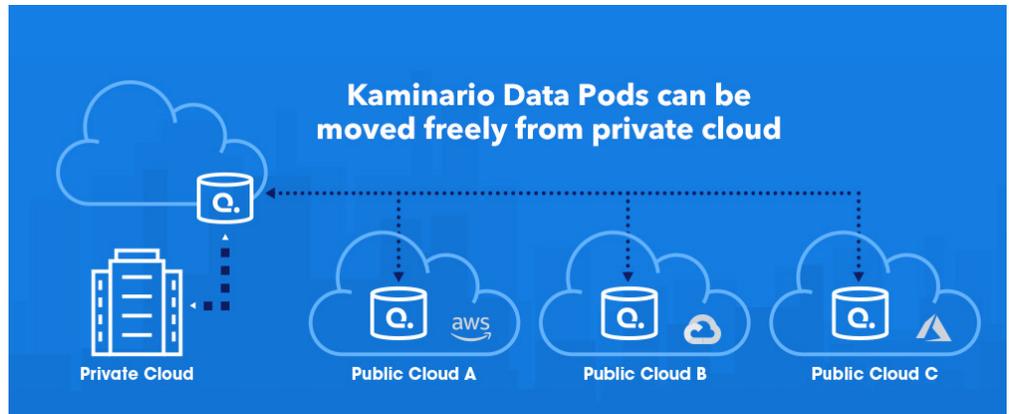
This solution brief provides a high-level overview of how Kaminario overcomes limitations of the public cloud that can drive up costs and increase business risk.

Digital. Without the Transformation

Kaminario's Cloud Data Platform separates the data from the underlying infrastructure, by providing a single, virtualized, multicloud data layer which provides industry-leading consistent performance for mission critical applications. In addition, Kaminario's rich enterprise-class data services combined with an Artificial Intelligence for IT Operations (AIOps) engine and orchestration layer enable customers to easily manage the costs and the risks of the hybrid cloud. Kaminario's mission is to simplify your hybrid cloud strategy, so you can focus on achieving your business goals and digital initiatives.



Kaminario's Cloud Data Platform helps customers move their applications to any cloud without the expensive and time intensive effort of reengineering enabling customers to easily manage the costs and minimize the risks associated with the public cloud.



Kaminario Architecture

Kaminario's Cloud Data Platform packages business-critical data and data services within a virtualized construct called Data Pods. Data Pods are completely decoupled from the underlying infrastructure, providing native mobility between private and public clouds. Kaminario's Cloud Data Platform consists of the following components:

VisionOS: Kaminario's Data Plane Virtualization component helps customers accelerate their hybrid cloud adoption journey. Running on any cloud, VisionOS delivers rich enterprise-class data services and turns any cloud infrastructure into the world's most capable scale-out cloud data and mobility platform. VisionOS delivers a consistent underlying software layer for business-critical applications and enables a true hybrid or multicloud.

Clarity: A cloud based AIOps engine that delivers predictive analytics through a comprehensive set of management and monitoring functionalities. This includes the unique capability to leverage application-level intelligence, machine learning, and predictive analytics. Clarity is built to maximize business agility while minimizing risk. Clarity's advanced analytics provide recommendations on self-healing policies and preemptive resource optimization while enabling a whole new automated approach to managing business and application service level agreements (SLAs).

Flex: Kaminario's data orchestration interface, delivers an on-demand ability to commission, optimize, manage, and decommission resources as needed to support application requirements and SLAs from within the Kaminario Cloud Data Platform. Customers can orchestrate their cloud resources as new workloads emerge, move, and evolve over time.



Use Cases

Data Mobility:

The road to getting to the cloud isn't smooth: most applications require rigorous reengineering in order to move to the public cloud — while also delivering consistent SLAs and customer experience. However, the re-engineering process often takes much longer than expected and results in significant unplanned costs.

Further complicating the process, more and more organizations are using multiple public clouds. There are several reasons why organizations are adopting a multicloud strategy, including: fear of vendor lock-in, technology innovation, changing costs, security and regulations, and availability zone restrictions.

Finally, as organizations look to support a global customer base, there is a growing need to make applications and data available in local geographies. This globalization requires that applications meet local regulations and provide an improved customer experience for each geography.

The common hurdle across all the above scenarios is the challenge associated with moving data from one platform to another. Often times, this takes longer than expected, resulting in higher costs and increased business risk. Kaminario's Cloud Data Platform allows you to easily move data around manually or through policy-based automation to any cloud environment

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The Cloud is about where you host your data and being very agile in delivering your data at a global scale. With Kaminario, we could plan ahead about building a true hybrid cloud environment.”

Friedrich Rub,
Industry CIO



We were able to put a lot more load on the SQL instances and still run them 10x – 20x faster, helping us improve customer satisfaction.”

Slavek Rotkiewicz,
Owner,
TPG Software

Reduce Costs:

Organizations often see their public cloud costs grow at an exponential rate due to a growing data footprint. Capacity and performance are directly proportional in the public cloud: if you have a small data set that needs high performance, you need to over-provision and thus overpay to achieve the desired performance.

Another drawback of the public cloud is that it only supports one-to-one mapping of applications and the underlying data set. This means that duplicate data pools need to be created for each new application. Public cloud platforms lack data services such as deduplication and compression, leading to unnecessary additional resources and additional costs.

Since Kaminario separates performance from capacity, you can scale out without over provisioning. In addition, the platform delivers enterprise-class data services in the public cloud, enabling data reduction resulting in significant cost savings. Finally, Kaminario enables a one-to-many mapping of data to applications, eliminating the unnecessary cost of creating duplicate data sets. As a result of partnering with Kaminario customers are able to realize a 30% or greater cost savings in their public cloud spend.

De-Risking the Business:

The most important factor organizations need to account for when moving from one cloud to another is to minimize business risk. As workloads move, risk is increased due to varying levels of performance from the underlying cloud infrastructures resulting in an inconsistent user experience and inability to meet SLAs.

The combination of the Kaminario Cloud Data Platform on top of any public cloud environment delivers consistent high performance from the underlying infrastructure (see table below), which in turn helps organizations reduce business risk. In addition, the Kaminario also delivers automation and policy-based scalability for both performance and capacity requirements. This ensures organizations are always able to deliver better than expected SLAs. Kaminario Flex also delivers the agility needed to quickly configure new resources so new products and services can be built and tested faster.

Kaminario + Tier 1 Cloud vs Tier 1 Public Cloud

	Kaminario + Tier 1 Public Clouds	Tier 1 Public Clouds
Performance Configurations	Consistent Performance: On all configurations	Depends on disk size Depends on # of vCPUs
Shared Data	Supported: R/W volume mapping to multiple hosts for clustered Apps Spare capacity consolidation	Not supported: Single host mapped to single data set
Performance Limitations	Unlimited Scalability for Performance: Input/Output Operations per second: 70K x N* - 110 K x N* Bandwidth – 1.9 GB/s x N* - 2.7 GB/s x N* *N - number of compute nodes *N - number of compute nodes	Input/Output Operations per second: 30k – 110K Bandwidth: 0.4 GB/s – 1.2 GB/s
Pricing	Average of 60% cost reduction	\$0.17 per GB/Month

Kaminario's Cloud Data Platform offers enterprises the flexibility they need to move their data to meet changing business needs, drive down the costs of managing applications, and reduce business risks typically associated with the public cloud. For more in-depth information visit www.kaminario.com or speak to a representative to schedule a demonstration of Kaminario's capabilities.

About Kaminario

Kaminario enables organizations to accelerate the movement of business-critical applications to the cloud. Its pioneering data plane virtualization technology allows customers to decouple the management and movement of data from the infrastructure it runs on. Changing the economics and agility of business-critical data, Kaminario changes the relationship between applications and infrastructure. Headquartered in Boston, Kaminario works with a network of strategic partners, globally. For more information, please visit www.kaminario.com.