

Kaminario and Flocker: All-flash Persistent Storage for Docker Containers



SOLUTION SUMMARY

- All-flash storage that supports stateful containers
- K2 support for Flocker driver
- Seamless integration with leading containerized management platforms:
 - Kubernetes
 - Swarm
 - Mesos

The Kaminario K2 all-flash array enables Docker users to utilize highly-available, cost-efficient persistent storage for their containers. The K2 delivers consistent high performance and low latency for mixed workloads of containerized environments, with the ability to independently scale performance and capacity. With a dedicated ClusterHQ Flocker driver for the K2, enterprises can now deploy modern Docker applications with no compromises on resiliency and availability.

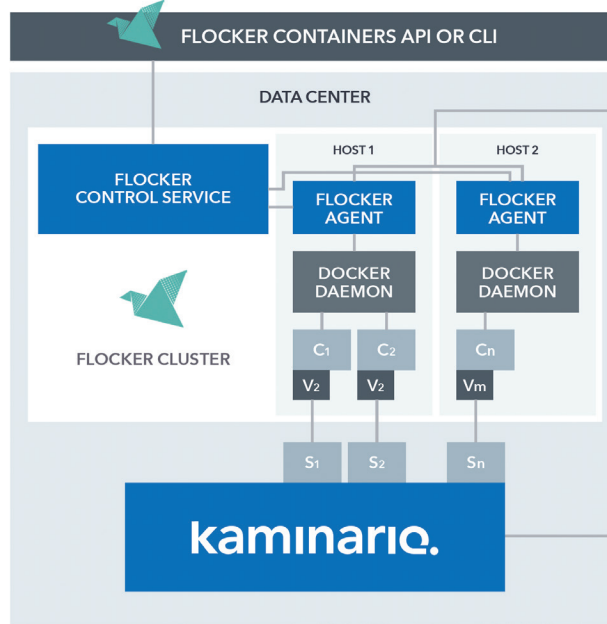
K2 Overview

The K2 all-flash array is the most cost-efficient general purpose storage platform that was designed from the ground up optimized for solid-state drive (SSD) flash storage and to accommodate multiple applications and workloads. Its unique scale-out/scale-up architecture allows the K2 to grow with customers' infrastructure needs, delivering agility and flexibility for today's demanding IT requirements.

Docker Powered by K2

The challenge of highly available persistent storage is no longer an inhibitor for enterprises to embrace container technology such as Docker. Kaminario's technology integration with ClusterHQ -- the leading provider of container data management software -- will allow customers to run and manage their Kaminario K2 all-flash storage system in a containerized Docker environment. As a result, they can now deploy applications quickly, consistently and reliably, while minimizing their operational app development overhead with the assurance of highly available persistent data.

Flocker Architecture With Shared Storage Backend



Notes:

Flocker Control Service & containers hosts can run on a VM or bare metal servers.

Flocker agent running on each host speaks to shared storage backend to create and mount volumes to individual containers

Key:

V = Volume
C = Container
S = Shared Storage



Contact

Contact a business development representative to answer any questions you may have.



Schedule a Demo

Schedule a demo with an engineer and learn if Kaminario's solution works for you.



Request a Quote

Request a quote for your application from our business development team.

K2 Gen6 All-Flash Array Specifications

Scaled Configuration	1 K-Block	2 K-Blocks	3 K-Blocks	4 K-Blocks
Usable Capacity*	30TB - 1PB	60TB - 2PB	90TB - 3PB	120TB - 4PB
IOPS	Up to 370K	Up to 740K	Up to 1.1M	Up to 1.5M
Throughput	Up to 6.2GB/s	Up to 12.4GB/s	Up to 18.6GB/s	Up to 25GB/s
Latency	0.35ms			
Media (encrypted)	480GB / 960GB / 1.92TB / 3.84TB 3D TLC NAND SSDs			
Connectivity FC/iSCSI	FC: 4x 16Gbps iSCSI: 4x 25GbE	FC: 8x 16Gbps iSCSI: 8x 25GbE	FC: 12x 16Gbps iSCSI: 12x 25GbE	FC: 16x 16Gbps iSCSI: 16x 25GbE

*Capacity is subject to drive size and the application data reduction ratio. For some datasets such as VDI the range will be higher.

About Kaminario

Kaminario, the leading all-flash storage company, is redefining the future of modern data centers. To learn more, please visit www.kaminario.com.