

Kaminario K2

Native Array-Based Replication



- Cost-efficient all-Flash DR
- License included
- Save on WAN costs



- Sub-minute RPO
- Sub-second RTO
- Instant DR testing



- Native integrated feature
- Snapshot-based
- Replicate worldwide

K2 Native Replication

Efficient K2 replication achieves enterprise data center resiliency using native snapshot architecture to perform asynchronous application-aware and crash-consistent replication. All essential disaster recovery capabilities support short recovery point objectives (RPO), as little as sixty seconds, and recovery time objectives (RTO) less than 1 second. All are native capabilities with no impact on production performance.

- Native replication requires no costly third-party software
- No performance impact on production
- Short RPO and RTO for disaster recovery
- Optimized for WAN connectivity and efficiency
- Application aware

The mature Kaminario native snapshot platform provides full support for VMware Site Recovery Manager (SRM). K2 replication benefits both primary and remote sites including active/active production topologies. This cost-efficient integrated native solution is simple to manage and independently retains replicated per-site snapshots. Consistent backups between sites are created with no impact on production performance. K2 customers can achieve a practical disaster recovery solution at no extra licensing cost and without the purchase of any additional hardware or software beyond mirrored capacity.

As successful businesses grow, their technology foundations must grow as well.



- Simple management
- VMware SRM support
- Application-aware snapshots



- Performance optimized across any distance
- No production impact



- Data reduction on the wire
- Cross-site efficiency

K2 Replication Features

Kaminario K2 remote replication benefits from the same asynchronous snapshot technology used for local snapshots, including:

- Replication updates are keyed to the frequency of snapshots, with a granularity of less than 60 seconds. Only data changed between snapshots is replicated, which reduces WAN traffic for systems with high write I/O activity.
- Volumes can be grouped together into a single consistency group, maintaining consistency across multiple volumes that make up an application. RPO policies can be separately applied to each group.
- Snapshot-based replication can provide application consistent data copies that synchronize the snapshot process by pausing the application. This enables lower recovery times (RTO) compared to crash-consistent images.
- Customers can manage snapshots to obtain flexible RTO/RPO recovery options. Up to 32 snapshot copies of a replication group can be retained at the remote site. Historical restores can be used to avoid data corruption. Snapshots can be used for application consistent copies as well as for general data protection.
- The replication process between two Kaminario K2 systems is created in the management GUI by providing the target IP address and credentials for a remote system. Bandwidth consumption for replication can be controlled at the physical layer using the WAN IP link or at the replication group level.
- K2 systems use compression to reduce network traffic on WAN links between systems.

Failover/Failback

- Primary production volumes are normally set as read/write, with remote volumes read only. A remote failover suspends updates to the primary volumes and marks them as read-only. Remote volumes are then enabled for read/write and production continues as the systems keep track of updates to the active secondary volumes.
- At any time, K2 systems can reverse the direction for any replication group and continue tracking differences between primary and secondary volumes.
- When systems are ready to be restored, the secondary K2 can apply updates back to the primary and return to normal operations.
- The Kaminario Storage Replication Adaptor (SRA) integrates with VMware SRM at both production and DR sites.
- K2 snapshots are application consistent and can be used to provide more reliable recovery than standard “crash consistent” replication copies.
- Validity of remote data copies can be tested without suspending replication or production applications.
- With no impact on production systems, snapshots can be used to create parallel test and development environments with minimal cost overhead.

Automation and Reporting

- K2 automation provides a high level of application data integrity and enables failover and failback management through tools such as VMware vSphere Site Recovery Manager.
- Administration can be managed through a web GUI, SSH command line interface, or REST-based API. All aspects of the replication and failover process can be automated through scripting.
- K2 systems display replication status through the management web GUI. A summary is provided on the “Replication” tab of the main Dashboard, with the ability to highlight more detailed replication information by clicking on the replication tiles within the dashboard window.

Kaminario provides enterprise-class all-flash storage, delivers cost efficiency, built from the ground up to take advantage of the most modern all-flash SSD capabilities. The Kaminario K2 array is ideal for workloads that require consistent, predictable performance, including Software as a Service (SaaS), server virtualization, desktop virtualization, and database OLTP, real-time analytics.

Licensing

- Kaminario provides replication at no additional license cost to customers. With only the cost of additional remote storage, replication and DR become very cost effective and simple to deploy. Replication efficiency also reduces bandwidth and can eliminate additional WAN optimization hardware or software. This all-inclusive replication is especially attractive to MSPs and SaaS providers.

System Requirements

Application aware snapshots for backup and replication

- Microsoft SQL snapshots using VSS
- Script for Oracle snapshots
- VMware vSphere Site Recovery Manager

Specifications

- Volumes up to 1000 and VG up to 256 limits
- 3rd Shelf support up to the limit of 60TB of net / 360TB effective capacity per K-block
- All Expansion sizes are supported including 1.92TB

Predictable Simplicity

As the K2 arrays scale up and out non-disruptively, no capacity management or a support platform for real-time monitoring, analytics and service management.





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.

About Kaminario

Kaminario, the leading all-flash storage company, is redefining the future of modern data centers. Its unique solution enables organizations to succeed in today's on-demand world and prepares them to seamlessly handle tomorrow's innovations. Only Kaminario K2 delivers the agility, scalability, performance and economics a data center requires to deal with today's cloud-first, dynamic world and provide real-time data access -- anywhere, anytime. Hundreds of customers rely on the Kaminario K2 all-flash array to power their mission critical applications and safeguard their digital ecosystem. Headquartered in Needham, MA, Kaminario works with an extensive network of resellers and distributors, globally.

For more information, visit www.kaminario.com

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