

## clearwater

### WHO:

Clearwater Analytics Investment Portfolio (SaaS) provider

### CHALLENGES:

Application performance, speed, application development & QA cycle times, effective DR

### PREVIOUS STORAGE

#### ENVIRONMENT:

135 TB NetApp Disk Arrays

### APPLICATIONS:

SaaS investment portfolio management, SQL Server databases, DR, and Dev/Test systems

### SOLUTION:

Separate Kaminario K2 Systems deployed for production, DR & Dev/Test

### BENEFITS:

- Reconciliation load times reduced 75 percent
- Long reports load 65 percent faster
- Single solution for multiple applications
- Improved customer satisfaction

# Clearwater Analytics Accelerates SaaS Workloads

## Executive Summary

As a Software-as-a-Service (SaaS) provider of investment analytics, Clearwater needs predictable storage performance coupled with ease of capacity growth and assurance of rapid disaster recovery. With growing requirements, they were approaching the outside limits of existing systems. Evaluating alternatives, Clearwater selected the Kaminario K2 all-flash array as their predictable storage platform for their business and to support their future needs.

## Company Overview

Clearwater Analytics is an innovative SaaS provider of investment portfolio reporting and analytics. They serve institutional investors in over 4,500 organizations that include insurers, asset managers, and financial institutions. Clearwater develops and hosts web-based SaaS applications that help clients automate critical investment data aggregation, accounting, compliance, reporting, and risk analysis processes.

## The Challenge

Before acquiring several Kaminario K2 all-flash arrays, Clearwater used NetApp hard disk arrays for production, DR, and Dev/Test environments. As the number of customers increased, so did significant amounts of data. Application performance was impacted by high latency and low throughput. The most critical production bottlenecks affected reconciliation and reporting.

Reconciliation processes are run for every account, often several times a day. They are essential checkpoints for data consistency and accuracy on holdings, transactions, and security master information. As Clearwater's business volume grew, loading database records occupied three quarters of allotted time. It became clear that delays, if unresolved, would have a negative impact on service level agreements (SLAs). That could have long term negative impacts on customer satisfaction and business reputation.

Unacceptably slow loading also affected the reporting process for large datasets. While many reports ran adequately on the disk storage systems, some more extensive and specialized reports experienced much longer load times. This impacted customer output as well as sales staff doing product demonstrations.



## Examining Options

Clearwater considered several options to address their production performance challenges. Upgrading the existing NetApp array would have been expensive and a doubtful fix to underlying performance problems. Alternative all-flash and hybrid storage vendors were too costly, not production worthy, or both.

Ultimately, with open and collaborative support from the Kaminario sales team, the Kaminario K2 system was selected. The K2 provided significant performance improvements at an attractive price/GB of usable storage. The Clearwater team was also excited that diverse requirements in multiple environments could be addressed with the same storage solution.

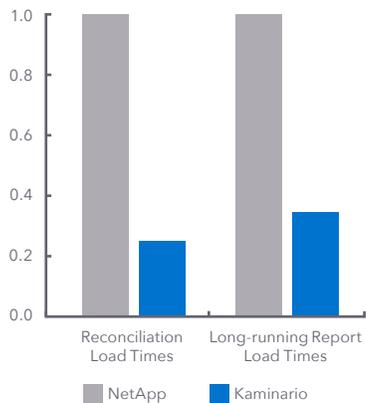
## Goals

- Improve performance of critical reconciliation and reporting processes
- Speed software development and QA cycles
- Improve DR effectiveness

**BENEFITS, IMMEDIATE & DRAMATIC**

- Reconciliation database load times reduced by 75 percent
- Predictable data load-time performance during limited daily time windows
- Long-running report load times improved by 65 percent
- Diverse needs of production, Dev/Test, and DR - all served by a single solution
- Improved customer satisfaction

**PERFORMANCE IMPROVEMENTS WITH KAMINARIO K2**



**The Solution**

Clearwater deployed separate K2 arrays for the production system, their disaster recovery site, and Dev/Test workflows. Each system was configured with 45TB of effective storage capacity.

“Our deciding factors in the choice of Kaminario were the combined cost/GB and system performance. We felt that many of the pure flash arrays were either too costly or not production worthy. Kaminario impressed us as being both enterprise ready and cost effective.”

James Price, Director of Product Development, Clearwater Analytics

**What's Next**

Clearwater now has a solution that will seamlessly scale up and scale out to satisfy expanded storage performance and capacity. Their storage can easily support production growth, development and test requirements and is ready for expanded disaster recovery. Clearwater knows how to accommodate whatever comes next.



### 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](http://www.kaminario.com)

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