WHO:
ZeroChaos, a global workforce management provider

CHALLENGES:
Application performance & scalability. Infrastructure expenses

IT ENVIRONMENT:
SaaS, Microsoft AX for ERP, MS SQL, BI, Mongo DB, VMware, Simplivity

SOLUTION:
Two Kaminario K2 in US and UK data centers supplying required performance for critical applications

BENEFITS:
- Reduced operations and infrastructure costs by 50%
- Exceeded capacity headroom objectives by 40%
- Increased performance 12X
- Mixed workloads handled by a single array

SaaS Predictability on a Global Scale

Blending cloud management and high-performance technology

Executive Summary

In support of their global growth strategy, ZeroChaos was moving to a managed private cloud. Their SaaS applications required assured and consistent performance at an acceptable cost. Through a series of incremental steps, they arrived at the right mix of MSP management and technology that combine a hyperconverged platform with Kaminario's all-flash storage in a fully virtualized environment.

ZeroChaos Overview

ZeroChaos is a global provider of workforce management solutions that manage 55,000 contingent employees. They help organizations achieve greater management and financial control of their workforce and talent supply chains. ZeroChaos' award-winning solutions, including its vendor-neutral Managed Services Program, enable procurement and human resources to improve visibility into contingent labor spend and talent pools, effectively manage and optimize contingent workforce program performance, and mitigate risks. Headquartered in Orlando, ZeroChaos has global operations in the Americas, Europe, and Asia.
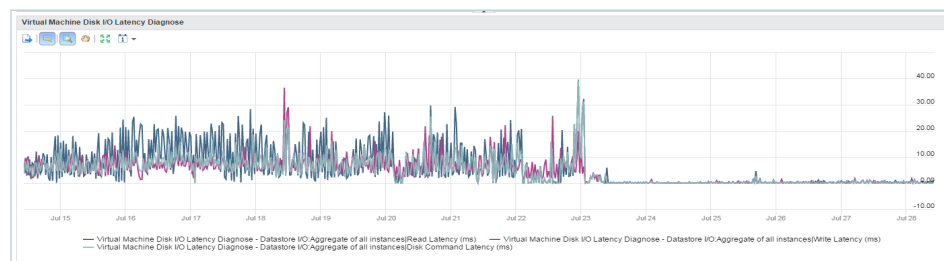
"We start with revenue objectives and then look for technology that will align. Our company's growth objectives were focused on increased share of wallet with new departments of existing customers. But complaints around speed and performance had to be resolved first."

Kenneth Lawrence,
Senior Vice President,
Security and Operations

The Challenge

With a fast growing business operating in 41 countries, the IT team at ZeroChaos was responsible for smooth and reliable technology support. That meant performance assurance for their SaaS applications and sufficient headroom in the infrastructure to sustain growth. The good news was that they were already servicing multinationals in technology, aerospace, telecommunications and auto manufacturing. So, a key element of the revenue growth strategy was increasing the share of wallet with those existing customer through internal referrals. That required an excellent reputation for service, speed, and performance. And they knew there was room for improvement.

Key applications had latency issues that slowed response times. It took too long for data to move and screens to load. "We knew we needed to attack the problem from two perspectives," said Ken Lawrence. " Continue to enhance application efficiency, and make the infrastructure as fast as possible. So, we began looking at possibilities."

ZeroChaos latency graph before and after Kaminario K2 installation

"We wanted to be certain that we would get the absolute best impact on our application. And, once K2 was in the mix, we did."

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Blake Keller,
Manager of IT Infrastructure,
ZeroChaos

kaminario.

IMMEDIATE BENEFITS:

- Increased performance by 12X, decreasing latency to .2ms, regardless of load

- Compression and deduplication have combined to exceed overhead objectives by 40%

- Costs in management overhead, licenses, and infrastructure reduced by $700k annually

- K2 adaptive block size handles both ERP and BI workloads, enabling mixed workload differences to be easily managed in a single array with no performance issues at all

- Management of the fully virtualized server infrastructure simplified, and performance increased

Examining Options

Managing ZeroChaos more efficiently as a global business meant a change in approach, a change in thinking. With support from their tech-driven and forward thinking CEO, the team began looking at cloud options. Up until then, their IT was 100% on premises. Now, the SaaS application needed a more scalable approach, one that would fix transaction speed issues and do it at an acceptable cost. Knowing that all of their challenges would not be resolved at once, the team decided to take an incremental approach.

They started by moving to a Managed Service Provider (MSP). The MSP provided a depth of required expertise and scalable cloud resources that assured the ZeroChaos team a stable and predictable operation. While that helped with the IO bottlenecks, it wasn't' sufficient.

Next step was a transition to a hyperconverged platform. And, in a change to the original MSP arrangement, this kit would be owned by ZeroChaos but continue to be housed and managed by the MSP. Again there was incremental progress, but they knew that there was still potential for better response times and less latency. That started an examination of the potential improvements using all-flash storage arrays.

"We followed a progression that saw improvements at each step, but we knew we could do even better."

Blake Keller,
Manager of IT Infrastructure Technology,
ZeroChaos

"We had done some advanced testing with our application to get a baseline as well as a clear idea of what success would look like."

"We needed to know that the infrastructure would get us the required performance and have no adverse impact on the applications."

"We needed to be certain that adding large customers would have no impact on performance."

"We needed cost-effective capabilities to scale, to expand operating locations, and to do it simply."

Blake Keller,
Manager of IT Infrastructure

The Solution

The ZeroChaos team briefly considered hybrid storage solutions before examining all-flash storage alternatives and Proof of Concept (POC) testing. It was important that they find a high-performance solution that would integrate with and protect the hyperconverged investment already made.

They brought in Pure, NexGen, and Kaminario K2. "We pushed them as hard as we could get them to go, and my DBA fell out of his chair when he saw the performance of K2," said Blake Keller. "The K2 supercharged our solution." The K2 also integrated easily with the existing hyperconverged systems. Kaminario all-flash would support the specific workloads that needed high performance – SaaS, ERP, BI – and the existing platform storage could continue to support less critical applications and data.

Initially, ZeroChaos had moved to a fully outsourced cloud model. Now, they have a blended model where they own critical equipment, and the MSP provides management, physical space, racks, power, and bandwidth. It was both a financial and a flexibility decision.

"Since going live with K2, we've added some large customers, and there has been no performance impact. None."

Kenneth Lawrence,
Senior Vice President,
Security and Operations

What's Next

ZeroChaos has created a repeatable infrastructure model and plans to roll it out in additional managed locations as they expand globally.

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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