



WHO:

Telefónica, a Multi-National Telco

CHALLENGES:

Application performance, scalability, escalating costs, data growth, database reliability

IT ENVIRONMENT:

SQL, 99% Virtualized

SOLUTION:

Kaminario K2 in 2 Data Centers

BENEFITS:

- Cost-effective scalability to match expanding business
- Performance improvement down from 12 to ½ ms consistently

Kaminario K2 Boosts Performance and Drives Predictable Growth for Telefonica

Executive Summary

Enhanced internet services were a growing and profitable business for Telefónica. However, storage performance couldn't keep pace with demand. With the introduction of Kaminario K2 in three data centers, the performance problems were resolved. Scale-up and scale-out enable storage expansion at pace with the business. Dedup, in-line compression and adaptive block size all contribute to lowering storage expenses. Predictability was established. Market expansion was underway.

Company Overview

Telefónica is one of the world's largest fully integrated telecommunication operators, providing communication, information, and entertainment solutions, in Europe, Latin America, and Asia Pacific. The company provides essential connectivity for the personal and professional lives of 327 million clients in 21 countries. They facilitate stable connections while safeguarding the use of information, and providing controls for digital life.

The Challenge

A division of Telefónica, created through acquisition, provides a platform for enhanced internet services. These are "over the top" services such as texting, voice, and video over internet protocol. It's an international offering developed by a team in Israel and operated through data centers in Frankfurt, the U.K. and Miami. The featured services are popular across their user base in Europe and South America. Particularly in countries with less reliable mobile communications, these added services enrich Telefónica's offerings with increased usability and customer satisfaction. The services are very profitable and rely on five nines availability.

Customer satisfaction was impacted, and subscriptions were getting cancelled. Performance improvements became a necessity.

Telefónica was preparing a marketing campaign to expand the popular enhanced services in Latin America. However, overloaded storage had been contributing to service slowdowns. Recovery from failures was already painfully difficult and slow. The EMC VMAX and VNX systems were pressed beyond their limits. Upgrades and enhancements to these existing systems didn't help. Maintenance events continued to be a huge problem.

Examining Options

The engineering team was already considering comprehensive infrastructure upgrades. As they began looking at available storage systems, they were quickly drawn to all-flash solutions. Recent changes in technology were promising. Dedup and in-line compression, combined with better power and management features, would reduce required storage capacity and operating expense. Flash storage had the potential to reduce total cost of ownership (TCO), while delivering massive performance improvements.

“We were tiering data and spending a lot of money to upgrade existing storage. It didn't help. We continued hitting limits that increased downtime and delayed services rollouts.”

Boaz Refaeli, Director of Engineering

Performance improvements were essential, but it was also important to select a single storage replacement that would support mixed application requirements. They wanted to stop working around degraded system capabilities and end forced overprovisioning. The team needed the ability to develop, deploy and present new features without production impact. They needed easy scalability and low latency that would resolve operational difficulties and ensure consumers were happy.

IMMEDIATE BENEFITS

- A dramatic performance boost during database maintenance with no service impacts:
 - Old storage processed only 1200 IO with delays of 10-12 milliseconds
 - Kaminario can process 240,000 IO in under 1/2 milliseconds
- Ease of scalability and growth: Launched new services for Brazil potentially reaching over 80 million customers
- The flexibility and predictability of scale-up and scale-out eliminate the requirement for deliberate over-provisioning. Capacity requirements decreased by two-thirds.
- Efficiency gains include excellent performance that improves TCO, save time, and eliminate bottlenecks while enabling faster feature development and release.
- With Kaminario Adaptive Block Size, Telefónica gained a single storage platform that handles mixed application traffic on the fly, with no performance impact.

The Solution

The Telefónica team examined offerings from multiple vendors, including EMC XtremIO, HP, and Kaminario. They did a detailed assessment of weaknesses, strengths and key benefits. After several rounds of evaluation with engineering and technical advisors, “the team agreed unanimously on the technical leadership of Kaminario,” said Refaeli. The decision centered on several key factors:

- Sheer performance impacts that totally eliminate service bottlenecks.
- Kaminario’s scale-up and scale-out capabilities, which means buying only what’s needed now, and easily expanding without disruption as service demand increases.
- Responsiveness from Kaminario sales, support and engineering teams, including willingness to share confidential product roadmaps under non-disclosure.

“We are extremely happy with the services and technology provided to us by Kaminario. Our ability to serve customers has improved, and we have a clear process to plan and scale future services. Our overall satisfaction is very high, and Kaminario has provided a huge benefit to our business.”

Boaz Refaeli, Director of Engineering

Kaminario K2 has provided Telefónica predictability to scale easily without impacting customer service. And, as they grow, scale-up, scale-out flexibility allows them to take advantage of new drives and processors when they become available.



What's Next?

Telefónica is now well positioned for reliably planned and calculated growth of profitable enhanced internet services. They have an assured means to maintain high performance while maintaining a cushion against inefficiencies in other parts of their infrastructure. With this success, the Telefónica CTO is exploring ways to leverage the benefits of Kaminario K2 and roll it out to other divisions of the company.



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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