



CASE STUDY

# Wasabi Hot Cloud Storage Leverages Western Digital's Patented Technology As It Aims To Be The Fastest, Most Affordable And Reliable Cloud Storage In The World



## About Wasabi

Wasabi is revolutionizing cloud storage for the data era. Trusted by tens of thousands of customers worldwide, Wasabi's hot cloud storage enables organizations of all sizes to securely store and instantly access a nearly unlimited amount of data at a fraction of the cost of competitive solutions. By increasing performance and eliminating complicated storage tiers and unpredictable fees for egress and API calls, Wasabi simplifies data management decision-making so that organizations can keep more of the data they need to drive innovation.

## Their Challenge

### *How to store, protect and deliver massive amounts of data cost effectively*

To accomplish their mission, Wasabi changed the cloud storage landscape with the development of their hot cloud storage, a leading-edge cloud technology that delivers breakthrough price-performance for cost-effectively storing the world's data. But we are talking about a lot of data. To do this, Wasabi needed to cut the cost of data storage by 80%.

## The Solution

To address this challenge Wasabi needed to build a high-performance object storage platform from the ground up, making use of the latest storage technologies. At the heart of the system was Wasabi's innovative architecture that provided a tier-free, instantly available hot cloud storage environment. Wasabi understands how to optimize the way data is stored on disk and designed a system that could read and write to large arrays of drives at enormous speeds, but they needed a partner that could provide the storage infrastructure to keep up. The vendor that could best provide an efficient, cost-effective and highly reliable platform to meet Wasabi's aggressive plans was Western Digital with its Ultrastar® Data102 storage platform.

**“Performance and reliability are table stakes if you want to deliver enterprise-class cloud storage. Delivering at the price point we wanted required a storage infrastructure partner as innovative as we are. Western Digital was that perfect partner for us.”**

- Pramod Kalyanasundaram, Senior Vice President,  
Engineering & Operations – Wasabi

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**“Hard drives are the fundamental building blocks of our service. There are so many of them that if you start having failures, those problems get unwieldy very quickly. Western Digital platforms help to eliminate those issues.”**

- Pramod Kalyanasundaram, Senior Vice President,  
Engineering & Operations – Wasabi



## 40+ Years of Storage Design Experience

Wasabi evaluated a large number of JBOD platforms from a variety of vendors. However, the problem with conventional dense disk shelves is that they frequently suffer from performance degradation due to induced vibration from adjacent drives. They also have overheating issues as the cooling air passing over successive rows of drives loses effectiveness as it gets heated up along the airflow path.

With decades of experience designing both devices and platforms side-by-side, Western Digital has seen and overcome these issues with a set of technologies developed based on a holistic view of devices, platform and their interactions. The first two of these innovative technologies are IsoVibe™ and ArcticFlow™.

Patented IsoVibe, vibration isolation technology, uses precise cuts in the baseboard to provide a suspension for the drives in the chassis, isolating them from transmitted vibration. The result is that consistent performance is maintained, even when all the drives are working hard. Innovative ArcticFlow, thermal zone cooling technology, introduces cool air into the center of the chassis, which helps drives operate at lower and more consistent temperatures than conventional systems. This results in lower fan speeds, reduced vibration, lower power consumption, quieter operation and ultimately higher reliability.

## Benefits

By partnering with Western Digital, Wasabi aims to be the simplest, most affordable, secure, and reliable cloud storage in the world and has realized the following benefits:

- **Reduced total cost of ownership (TCO):** According to detailed analysis, the Western Digital solution has substantially reduced Wasabi's storage costs, including both capital expenditures and operating costs for power, colocation, and maintenance. In all, the analysis shows the Ultrastar platform will deliver more than 25% lower cost per terabyte than competing solutions.
- **Simplified operations:** By standardizing on Western Digital Ultrastar platforms at data centers worldwide, Wasabi has made its vast storage infrastructure much easier to manage, maintain and scale in the future when needed.
- **Improved long-term reliability:** With Ultrastar storage, Wasabi benefits from Western Digital's rich history of innovation to provide rock-solid reliability at scale and under demanding performance requirements.

## Conclusion

Designing an entirely new approach to cloud storage required Wasabi to develop game-changing, leading-edge cloud technology and to find a partner that could provide a reliable, high-performance infrastructure to affordably store a nearly infinite amount of data. The combined solution from Wasabi and Western Digital has dramatically changed the economics of high-performance cloud storage by delivering incredible performance, efficiency and reliability that can help give your business a competitive edge.

## Western Digital