# TOSHIBA

## Case Study



"NovoServe is on a mission. We want to further develop the internet as a service using our considerable skills and experience. This mindset matches perfectly with Toshiba's enduring expertise in delivering extraordinary enterprise-grade storage solutions. Together we can empower our customers with the best Infrastructure-as-a-Service & Storage solutions, focusing on innovation and sustainability, and striving to reduce our ecological footprint."

#### © NovoServe

### Herke Plantenga | CEO NovoServe

### Industry

Concentrating on the IaaS industry and its dedicated data storage requirements.

### **Key challenges**

Ensuring operational reliability 365/12 and flawless services for customers.

Harmonize large storage capacity and high-performance benchmarks with cost-effectiveness.

### Solutions

Deployment of the ultra-reliable, highcapacity Toshiba MG-Series 3.5-inch format HDDs across NovoServes's European data centers.

#### **Business Outcomes**

Rapid and uncomplicated installation of Toshiba HDDs.

Trouble-free operation, with minimal maintenance or replacement work required.

Significant capital and operational cost benefits for NovoServe.

## INTRODUCTION

NovoServe, founded in the Netherlands in 2014, is an international Infrastructure-as-a-Service (IaaS) provider focused on delivering highly customizable dedicated bare metal servers.

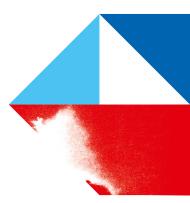
### **EXCELLENT CUSTOMER SERVICE**

In less than a decade, NovoServe has become one of the largest and most sophisticated networks in Europe. The secret behind this success story is a service that always puts the customer first. Low-latency networking, high volume traffic, tailored security measures, and service level agreements, plus – as CEO Herke Plantenga puts it – "a love and curiosity for technology" are key for NovoServe's team of expert network engineers.

With more than 800 partners worldwide, the company has already deployed more than 7000 dedicated bare metal servers for diverse industries ranging from advertising, gaming, and streaming to resellers and companies in the financial sector. Using bare metal servers in these applications can save costs and improve performance, as well as enhance security and control. "Physical dedicated servers are inherently safer for our customers, and that, combined with our ISO 27001 certification and embedded security features, help ensure that the solution is the best product they can buy." For fintech and adtech in particular, compliance with general data protection regulations is key, which means it is critical for companies to know through which countries their data are being routed. NovoServe's network provides demonstrable compliance with all laws and regulations and needs data storage solutions that are extremely secure and reliable.

## SHARING THE SAME BUSINESS VALUES

Adapting existing data centers to be more power-efficient is another high priority for NovoServe. Here, versatile hardware and high-end equipment play a pivotal role in building more power efficient server architectures. With Toshiba, NovoServe has found a partner who also puts sustainability, reliability, robustness, and performance at the heart of its technology.



## TOSHIBA



"At Toshiba, we are enthusiastic about our partnership with NovoServe. Both companies share common values, especially when it comes to service excellence and technological leadership. Together we will push the boundaries to ensure the most reliable and sustainable data storage solutions. We look forward to collaborating on this exciting venture."



Larry Martinez-Palomo Vice President & General Manager, Storage Products Division, Toshiba Electronics Europe GmbH

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Copyright 2023 Toshiba Electronics Europe GmbH. Product specifications are all subject to change without notice. Product design specifications and colours are subject to change without notice and may vary from those shown. © NovoServe. Errors and omissions excepted. Valid from 11/2023. Toshiba scores with their state-of-the-art recording technology and compact, reliable, high-capacity HDDs. The helium-sealed design enables thinner disk platters, so Toshiba's MG Series HDDs feature an innovative 9- or 10-disk configuration. This enables heightened storage densities.

As of today, the 3.5-inch form factor units of the MG series feature capacities of up to 22TB, respectively, with a data transfer performance of 281 MB/s and disk rotation speeds of 7200rpm.

## **TECHNOLOGICAL INNOVATION DRIVES SUSTAINABILITY**

These technological achievements – capacity increase, incorporation of helium, enhancements in relation to the read and write heads etc. – all have one thing in common: improved power consumption. The Watts per Terabyte (W/TB) of a typical Enterprise-HDD has dropped five-fold from 2.6 to 0.5 W/TB, which will significantly reduce the energy needed to power Toshiba's storage solutions.

## **APPRECIATION FOR TECHNOLOGY ON BOTH SIDES**

The long-term reliability of the MG Series, combining a Mean Time To Failure (MTTF) of 2.5 million hours with low power consumption (see above), delivers significant advantages to customers in terms of total cost of ownership (TCO). The longevity of the HDDs also contributes to improved sustainability because fewer replacement devices are required over time. In the future, adapting RAID and SDS storage schemes may allow the use of idle modes (which exist already) to achieve further dramatic reductions in power consumption.

And there is another important benefit. The 3.5-inch form factor of Toshiba's HDDs makes it easy to incorporate them into NovoServe's server bays, optimizing the limited space in data centers.

## EQUAL PARTNERS – TRUSTING & RELIABLE COLLABORATION

Toshiba has now become NovoServe go-to supplier for data storage components. There are currently over 5000 HDDs deployed at NovoServe's data center facilities in the Netherlands and United States.