

Breaking Storage Bottlenecks for Hardwareluxx's High-Traffic Media Platform

CUSTOMER SUCCESS STORY | SEPTEMBER 2026



EXECUTIVE SUMMARY

Hardwareluxx Media GmbH, a leading technology media platform in Germany and publisher of "Technology Insider" in the Netherlands, reached the limits of its legacy server environment as audience traffic and workload complexity surged. To sustain growth, improve responsiveness, and support AI-driven services, Hardwareluxx partnered with Graid Technology, Kingston, Intel, and Gigabyte to modernize its infrastructure.

By deploying SupremeRAID™ (by Graid Technology) with Kingston DC3000ME PCIe Gen5 NVMe U.2 SSDs and Gigabyte high-performance servers running Proxmox and Intel Xeon 6 processors, Hardwareluxx created an AI-ready, future-proof platform that delivers more than 100 GB/s read performance in RAID 5 with consistently low latency and higher VM density.

THE CHALLENGE

Hardwareluxx operates a high-traffic technology media platform that has experienced rapid audience growth and increasingly complex digital workloads. The existing environment, based on a nearly five-year-old ESX virtualization platform and SATA-based storage, was no longer optimized for the scale, performance, and responsiveness required by modern applications and larger datasets.

As web traffic grew and AI-driven workloads became more common, the infrastructure struggled to deliver enterprise-grade storage performance, predictable latency, and sufficient VM density. Hardwareluxx needed to overcome the limitations of legacy RAID on SATA storage and design a server architecture that could support continued expansion without repeated forklift upgrades.

- Legacy ESX virtualization and SATA storage unable to meet modern performance and scalability demands.
- Bottlenecks in storage throughput and latency impacting user experience and workload responsiveness.
- Growing VM density and mixed workloads increasing pressure on compute, memory, and storage resources.
- Need for a future-proof architecture capable of supporting AI-driven applications, larger datasets, and higher traffic levels.

CHALLENGE

Meeting Higher Expectations for Speed and Stability

Rapid audience growth, expanding workloads, and AI-driven services created performance and scalability demands that legacy ESX and SATA-based storage could no longer meet.

SOLUTION

SupremeRAID™ with Kingston Gen5 NVMe and DDR5 on Gigabyte Servers

SupremeRAID™, Kingston DC3000ME PCIe Gen5 NVMe U.2 SSDs, Intel Xeon 6 processors, and Gigabyte servers running Proxmox form a modern, GPU-accelerated RAID architecture designed for high-traffic, virtualized environments.

RESULT

Performance at Scale for a Growing Digital Platform

Hardwareluxx now benefits from more than 100 GB/s RAID 5 read performance, higher VM density, consistently low latency, and an AI-ready, future-proof server infrastructure capable of supporting continued growth.



>100 GB/s
RAID 5 read performance



AI-ready
NVMe-centric architecture



Higher VM density
& improved responsiveness

THE SOLUTION

Virtualization and Compute Modernization:

Hardwareluxx migrated its environment to Proxmox, enabling more efficient resource allocation, simplified management, and improved scalability across virtualized workloads. The new platform runs on Intel Xeon 6 processors, providing the CPU performance headroom required for dense, mixed workloads and AI-ready services.

Deployment at Scale:

At the heart of the new storage stack are Kingston DC3000ME PCIe Gen5 NVMe U.2 SSDs, enterprise-class drives designed for AI, HPC, edge, and cloud workloads. DC3000ME provides extremely high bandwidth, low latency, and strict QoS, delivering predictable random I/O and latency across a wide range of server workloads. Replacing legacy SATA storage with DC3000ME gave Hardwareluxx the NVMe performance required to support modern applications and database workloads.

GPU-Accelerated Storage with SupremeRAID™:

SupremeRAID™ removes traditional RAID bottlenecks by offloading RAID processing to the GPU, allowing user data to bypass legacy RAID card constraints and fully utilize NVMe bandwidth. This approach maximizes I/O and throughput while freeing CPU cores for application workloads, delivering high performance even in RAID 5 and RAID 6 configurations. For Hardwareluxx, SupremeRAID™ ensures that the full performance potential of Kingston's Gen5 NVMe SSDs can be realized across the virtualized environment.

THE RESULT

Performance at Scale for a Growing Digital Platform

By modernizing its infrastructure with SupremeRAID™, Kingston, and Gigabyte, Hardwareluxx transformed its server platform into an AI-ready, high-performance environment capable of supporting continued growth.

Extreme NVMe Performance and Low Latency

The new system now delivers more than 100 GB/s read performance in RAID 5, with extremely fast random write speeds that support demanding database workloads and high-traffic web services. Even in RAID 5 and RAID 6 configurations, SupremeRAID™ combined with Kingston DC3000ME maintains consistent low latency, enabling Hardwareluxx to process large volumes of data quickly while preserving high availability.

Higher VM Density and Improved Responsiveness

With Kingston DDR5 memory and modern virtualization on Proxmox, Hardwareluxx can support higher VM density per host without sacrificing performance. Workload responsiveness has improved across the environment, allowing the platform to handle peak demand more effectively and deliver smoother user experiences.

Scalability and AI-Readiness

The architecture now provides the headroom required for AI-driven applications, larger datasets, and future technology demands. Hardwareluxx has built a future-proof server platform that can scale with audience growth and evolving workload profiles, supported by partners committed to enterprise-class memory, storage, and server innovation.

About Graid Technology

Graid Technology keeps AI infrastructure moving. We remove the bottlenecks that slow training, inference, and every workload in between, ensuring resilient, scalable performance across any deployment. Headquartered in Silicon Valley with global operations and R&D in Taiwan, Graid Technology is building the infrastructure layer for the AI era. Visit graidtech.com

About Hardwareluxx

Hardwareluxx Media GmbH is a leading technology media platform in Germany and publisher of "Technology Insider" in the Netherlands, delivering in-depth hardware reviews, news, and analysis to a growing audience of technology enthusiasts and professionals. Learn more at www.hardwareluxx.de



Learn more at graidtech.com

