



**MAGUAY**  
KNOWLEDGE AS A SERVICE

# Maguay PowerStor All-Flash Single-Node System

Maguay Computers SRL is the leading Romanian computer system builder with notebooks, PCs, and data storage systems marketed under its own brand. Maguay is also a top-rank provider of complex IT projects - able to implement and deliver hardware and software turnkey solutions by ensuring the quality of service and support.

Their latest **All-Flash Maguay PowerStor Single-Node Data Storage System** is an Intel-based server with Intel® Xeon® CPU that enables building data storage infrastructure that is flexible and can be customized according to the most demanding business needs and requirements.

The certified solution with ZFS- and Linux-based Open-E JovianDSS data storage software and Maguay hardware provides:

- Enhanced data storage performance
- Extremely low latency
- 100GbE connectivity
- Data integrity
- An unlimited number of snapshots and clones
- All-Flash data storage system

On top of that, the system utilizes the advanced **Intel® Security features (like Intel® PFR, Intel® TME, and Intel® TPM)** that are the built-in advantages of this solution.

Maguay PowerStor Single-Node Data Storage System is an All-Flash solution built on **U2 PCIe 3.1 Solidigm P4600 fast SSD drives** providing the best performance and latency levels for even the most resource-intensive business applications.

**Maguay is Open-E's long-term Gold Partner** which is proof of the company's in-depth knowledge of the Open-E software. Due to that, Maguay offers an Open-E certified solution together with reliable technical support, from the initial installation to daily maintenance.

This extremely fast and reliable Maguay and Open-E data storage solution can be seamlessly used as a high-performance NAS appliance with NVIDIA® DGX™ systems, designed especially for accelerating AI projects, and other most demanding applications like video streaming, or hypervisor platforms used for virtualization.

## Recommended for:



Education



Health  
Research



Space  
Research



Automotive



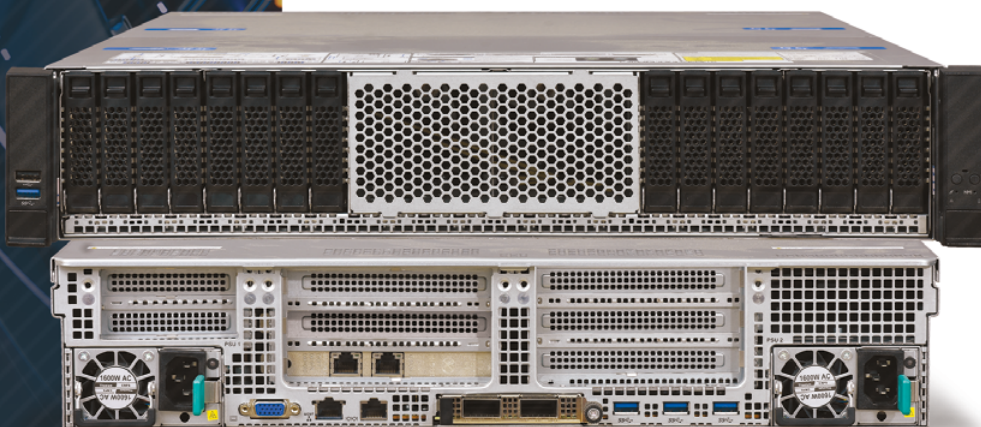
Energy



Oil & Gas



Governmental  
Cloud purposes



**With the Open-E certified Maguay PowerStor you can build:**

- Reliable private CloudBox
- High-performing I/O storage
- Fast storage for Big Data ZFS appliances
- Storage for HPC and AI

*open-e* ∞  
**JovianDSS**

# Ultra-fast and multi-purpose Maguay PowerStor

## Enhanced storage performance

Nowadays, enterprise storage systems have to provide **high-performance** and **low latency levels**, while also being reliable, and affordable. This is exactly what the Maguay PowerStor All-Flash Single-Node System has to offer. Open-E JovianDSS-based Maguay PowerStor is an innovative data storage system combining the super-high performance of the Solidigm SSD drives and advanced connectivity hardware to provide a high-end solution for most performance-hungry applications. On top of that, powerful tuning tools **allow the system to optimize on I/O heavy databases** or high throughput video editing equally well.

## Data integrity check

The Maguay PowerStor All-Flash Single-Node System effectively detects data corruption, as even minor integrity violations could cause loss of data. Maguay PowerStor **ensures reliability by check-summing individual blocks of data** and once faulty blocks have been detected they are automatically rewritten. If the same error is found several times the data blocks are moved to different parts of the SSD. **Each read/write is checked automatically** plus you can schedule to perform checks on not accessed blocks. All actions are done in atomic writes to ensure consistency of your data and to reduce data loss, even during power cuts.

## Flexible scalability

The Maguay PowerStor All-Flash Single-Node System will let you experience unlimited flexibility and minimize unappreciated downtime. Thanks to the Open-E JovianDSS data storage system you can take **advantage of unlimited snapshots for easy backup**, unlimited clones for easy duplication, unlimited capacity with volume sizes up to one Zetabyte, as well as an **unlimited amount of disks which can be increased** on the fly without effort by using thin provisioning. There are no limitations and you may easily control the total cost of ownership and expand your storage infrastructure as data grows.

## Simplified system management

Management of Open-E JovianDSS and its advanced features is easy and intuitive compared to many competing solutions on the market. The WebGUI provides a **quick overview and management of all storage resources and features**. After analyses of data storage usage and user interaction, the clicks per step in each functionality have been reduced to a minimum, i.e., in creating iSCSI targets or when expanding the size of your storage. This way, you can quickly and easily manage Maguay PowerStor with Open-E JovianDSS, barely involving the actions of a storage administrator.



Maguay brand meant from the very beginning next-generation computing technology, built without any compromise. And so is the Maguay PowerStor Non-Shared Storage Cluster powered by Open-E JovianDSS.

**Buy the solution now!**



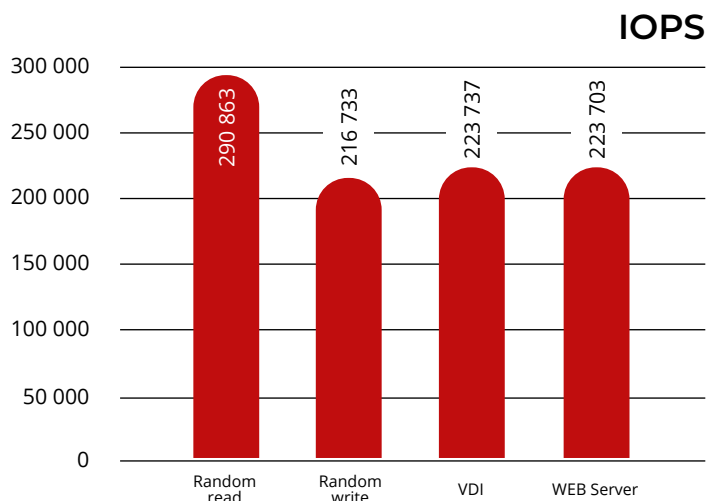
# High Performance and Flexibility for the Most Resource-Intensive Applications

## Data compression and in-line deduplication

Maguay PowerStor offers data compression to minimize storage capacity usage, ultimately boost performance, and take less space on your storage. Find resource-friendly compression protocols (lz4) with low system resource utilization at medium compression rates, but also protocols that can achieve very high rates for archiving or backup (as gzip-9). The in-line deduplication feature in Maguay PowerStor **removes redundant data and minimizes storage capacity usage**. The software checks each block for redundancy in the system and if it finds a match the new block isn't written; instead, a shortcut leading to the original block is created. Such a system can **reach a deduplication ratio of 3:1 or more**, which means that if you place 3TB of data it will only use 1TB of physical disc space. This feature is especially interesting for highly repetitive data, i.e., in VDI, server virtualization, or backup, where much higher deduplication ratios can be reached.

## Hardware Independence

Freedom of choosing the hardware that fits your business needs can save you a significant amount of money and allows you to customize a server system specific to your needs. But you need to be an expert if you want to create a solution that is perfectly adapted to the requirements of your environment. With the Maguay PowerStor All-Flash Single-Node System you benefit from the best hardware compatibility on the market since it uses hardware components that are ideal for performance, reliability, and compatibility, but also **provides you with additional fully-certified hardware options for your choice**. This way you can choose the hardware you need – depending on price, performance, quality, and availability – and you won't waste money on unnecessary components.



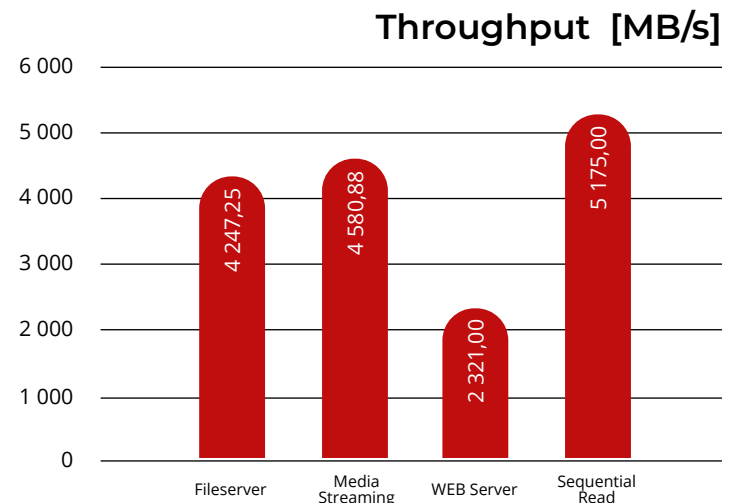
## Optimized for Data Centers

The Maguay PowerStor All-Flash Single-Node System is **optimized for modern data centers and ready for compute-intensive applications** that involve Artificial Intelligence, big data, intensive virtualization workloads, and high-density server configurations. The system allows administrators **intuitive management of data storage infrastructures** and maintenance of continuous operations during updates or refreshes. By choosing it you can benefit from flexible CPU power, networks running 1, 10, or 40 Gb Ethernet, as well as knowledge and experience of Maguay to develop appliances specialized for datacenters.



## Thin provisioning and an unlimited number of snapshots

Maguay PowerStor uses thin provisioning to improve your storage utilization by allocating an exact amount of server space at the required time. You'll **eliminate the cost of unused storage space, plus, you'll never have to pre-allocate storage up front** and buy too much hardware again. There is no need for evaluating storage requirements and taking the risk of rebuilding the entire system when it runs out of space. Also, every Maguay PowerStor allows an unlimited number of snapshots – greatly simplifying backups, replications, and data recreation in case of accidental deletes or viruses. **Snapshots are a must-have option for effective disaster recovery scenarios**. Schedule snapshots for months, weeks, hours, or even minutes. With Maguay PowerStor it is easy to manage storage capacity and set notifications when physical space shrinks.





# Hardware details

	Default configuration	Options
Motherboard	Intel® Server Board M50CYP2SBSTD	-
CPU	2x Intel® Xeon® Gold 6334 CPU 3.60GHz	Intel® Xeon® Gold 6354
RAM	16x 16GB Samsung M393A2K40DB3-CWE	32GB, 64GB, 128GB DDR4-3200 RDIMM modules (max 32)
Storage raw capacity	25,6TB	up to 51.2TB with 16 pcs of 3.2TB SSDs
Data drives	16x Solidigm SSD DC-P4600 1.6 TB, U.2	up to 16x Solidigm SSD DC-P4600 3.2TB, U.2
Network interface	1x Intel® Ethernet Network Adapter E810-CQDA2 for OCP 3.0 1x Intel® PRO/1000 PT Dual Port Server Adapter	-
Form factor	2U	-

## About Maguay

The most important objective of Maguay is to strengthen the company's position as the main Romanian system builder of servers and storage solutions, as well as an IT systems integrator and various IT solutions.

Maguay develops its own IT products, software platforms, and complete integrated solutions for its customers, with a TCO report (total cost of ownership) / competitive quality. The expertise gained in time is based on the integration of the most current and viable technologies in the most complex and varied projects. The company has built a strong reputation among customers and partners, having satisfied customers with which it has long-term partnerships. We provide software-defined storage solution (SDI) based on standardized hardware (Maguay servers) and high-performance software.

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## About Open-E

Open-E, founded in 1998, is a well-established developer of IP-based storage management software. Its flagship product Open-E JovianDSS is a robust, award-winning storage application which offers excellent compatibility with industry standards, and is the easiest to use and manage. Additionally, it is of the most stable solutions on the market and undisputed price performance leader.

Thanks to its reputation, experience and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies. Open-E accounts for over 37,000 installations world-wide and has received numerous industry awards and recognition, also with its product Open-E DSS V7. For further information about Open-E, its products and partners, visit [www.open-e.com](http://www.open-e.com).

## About the Open-E JovianDSS Server Certification

Open-E JovianDSS delivers software-defined storage which results in a wide variety of different hardware requirements such as performance, range, capacity, capability, and connectivity. To ensure compatibility and robust storage environments, all selected partners offer storage systems which are tested, benchmarked, and certified by Open-E. This way, customers are able to use solutions that require exceptional security and redundancy, without compromising performance.