

# **HPE MSA Gen6 Storage**

Hybrid-flash storage for today's SMB

Flash-ready hybrid storage systems designed to deliver hands-free, affordable application acceleration for demanding SMB workloads



HPE MSA Gen6 Storage solutions provide the entry point for SAN storage supported by HPE ProLiant servers. HPE MSA Gen6 offers a portfolio of arrays, drives, and options that deliver a common set of features, including:

- **Dual-controller, two-pool, active-active design architecture:** Delivers the resiliency, application availability, and uptime required for SAN-based storage
- Gen6 RAID acceleration ASIC and controller design: Up to 80% performance improvement compared to HPE MSA Gen5, lowering system latency and improving user productivity
- 12 Gb SAS midplane: End-to-end high-performance communication between the controller and all connected media
- **Wide range of SFF/LFF media options:** Offers the customer a choice in media and the ability to balance the budget against performance needs
- Expand storage capacity with a choice of SFF and LFF drive enclosure options: Grow-as-you-go capacity expansion helps ensure a long and useful life for your storage array
- Self-encrypting drive (SED) options for SSD and HDD media: Adds a layer of security to protect against data theft
- **HPE MSA-DP+ data protection:** High-performance RAID technology that significantly improves performance, availability, and rebuild times compared to traditional RAID types
- HPE MSA Advanced Data Services: Optional license supported on all HPE MSA Gen6
  arrays (included with the HPE MSA 2062 Storage Array) that provides access to automated
  data tiering, remote snap replication, and additional snapshots
- **HPE MSA Health Check:** Cloud-enabled utility that uses systems logs to analyze the health of your HPE MSA system

### Even when it's small, it's a big balancing game

Just like today's enterprise IT users, small and medium businesses (SMBs) must constantly juggle the trade-offs between budget, performance, and simplicity within their IT portfolio.

Budgets are either flattened or declining, driving them to do more with less. Both IT and human resources are impacted, which requires significant boosts in performance and automation to keep up with demands. And, at the same time, their IT infrastructures must constantly evolve and grow to take advantage of market opportunities.

The HPE MSA portfolio of hybrid storage solutions provides key IT infrastructure required to balance these trade-offs. Now in its sixth generation, the HPE MSA Storage portfolio remains one of the leading entry-point SAN storage solutions for HPE servers over the last decade.

The HPE MSA Gen6 Storage portfolio provides three key advantages for customers looking to deploy SAN-based storage, including:

- 1. Affordable acceleration to hybrid-flash storage
- 2. Real performance, you can see and experience
- 3. Proven simplicity in deploying and managing storage resources

### Transition to affordable hybrid-flash storage

### Pick your point of entry

Choose HPE MSA 1060 Storage for a low-cost HPE SAN storage solution offering support for hybrid-flash media. Designed to meet entry-level storage requirements, the HPE MSA 1060 is ideal for users with fixed capacity and performance needs supporting smaller IT workloads.

For larger dynamic workloads, choose HPE MSA 2060 Storage. With more than twice the performance and almost triple the capacity compared to the HPE MSA 1060, the HPE MSA 2060 provides the flexibility to scale both performance and capacity to meet demanding IT workloads.

To start with a hybrid-flash storage configuration, choose HPE MSA 2062 Storage. Combining an HPE MSA 2060 with two preinstalled 1.92 TB SSDs and an HPE MSA Advanced Data Services license, HPE MSA 2062 offers significant savings for those users looking to start with a tiered storage solution on day one.

### **Balance budget and performance**

Start small and scale as needed with any combination of solid-state drives (SSDs), high-performance enterprise SAS HDDs or low-cost midline SAS HDDs.

### **Expand as your IT grows**

With flexible, modular architecture that facilitates future growth, the HPE MSA portfolio supports LFF and SFF expansion enclosures to expand your storage capacity as needed. Up to three expansion enclosures can be added to each HPE MSA 1060 array, while as many as nine can be added to the HPE MSA 2060/2062 array.

## Experience an immediate boost in performance

### **Built for speed**

A new Gen6 RAID acceleration ASIC and controller architecture improve system performance by as much as 80% as compared to HPE MSA Gen5. This improvement in IOPS and throughput help lower system latencies enabling connected systems and users to experience better productivity.

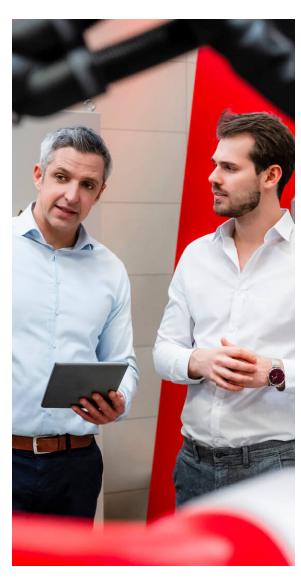
#### **Automated performance tiering**

Utilizing the latest automated tiering v2.0 enhancements, hybrid storage configurations automatically respond to I/O changes in real-time to deliver up to 45% more workload application acceleration when compared to HPE MSA Gen5. Automated tiering v2.0 operates at the pool level, is always on, and is initiated by adding more than one drive type to the pool.

## Redefining RAID-based recovery for entry-level SAN storage

HPE MSA-DP+ data protection brings significant improvements to traditional RAID technology, including up to  $25x^1$  faster rebuild performance (versus RAID 6), removal of idle drive spares, and configuration expansion at a more granular level (with as little as one drive per add).





## HPE MSA Genó Storage: flash-ready, hybrid

#### **HPE MSA 1060**

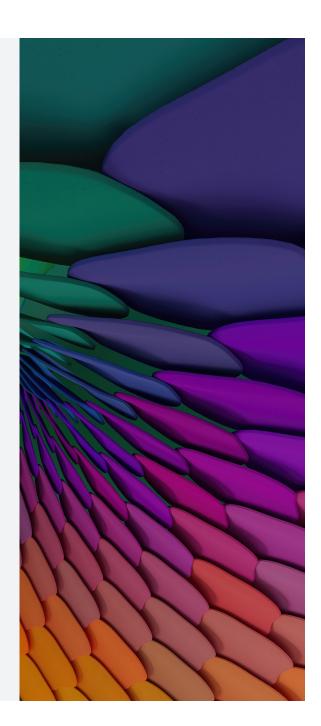
- Two controllers per array
- Two host ports per controller
- 16 Gb FC, 1/10GbE iSCSI (10GBase-T), or 12 Gb SAS connectivity
- Up to 154K IOPS with 6.6 GB/s throughput
- Maximum 184 TB raw capacity (base)
- Add up to three SFF or LFF disk enclosures for a maximum capacity of 904 TB

### **HPE MSA 2060**

- Two controllers per array
- Four host ports per controller
- 16 Gb FC, 10/25GbE iSCSI (SFP+), 1/10GBase-T or 12 Gb SAS connectivity
- Up to 395K IOPS with 13.1 GB/s throughput
- Maximum 240 TB raw capacity (base)
- Add up to nine SFF or LFF disk enclosures for a maximum capacity of 2.4 PB

### **HPE MSA 2062**

- Flash-ready HPE MSA 2060 bundle
- 2x1.92 TB RI SSDs preinstalled
- Advanced Data Services license included



## Remove complexity from your storage infrastructure

#### Intuitive user interface — no manuals needed

The HPE MSA Storage Management Utility (SMU v4) supports system configuration with step-by-step guided workflows that help eliminate errors and dramatically improve the user experience.

### Simplified dashboard offers at-a-glance storage management

HPE MSA SMU v4 management enhancements allow users to quickly access important system information, including alerts, capacity, performance, and activity.

### Avoid unplanned downtime with a few simple steps

The HPE MSA Health Check utility simplifies the tasks required to regularly check your HPE MSA storage system's health. By simply uploading a log file from your HPE MSA array to the cloud-hosted HPE MSA Health Check utility, the application systematically checks for signs of non-compliance with multiple availability-related best practices. Once completed, HPE MSA Health Check generates a report detailing your system's health and adherence to all best practices and known failure signatures. The report also provides detailed next-step guidance on solving any issues.



## **HPE ProLiant and HPE MSA** — better together

The HPE MSA Storage Array has been designed for use with HPE ProLiant servers. With over 15 years of integrated selling, HPE MSA continues to serve as the entry point for SAN storage, supporting the entire portfolio of HPE ProLiant servers.

### **Learn more at**

HPE.com/storage/msa

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