

9x ROI on Flash Drives

Executive Strategic Brief



Why This Program, Why Now

Flash pricing volatility is no longer a short-term market fluctuation. It reflects structural constraints in NAND manufacturing, capital intensity, and supply concentration. At the same time, data growth continues to accelerate. Organizations are being forced to choose between expanding expensive all-flash capacity or constraining workloads to stay within budget. Most solutions attempt to optimize flash through compression, De-duplication, or incremental efficiency improvements.

This program takes a different approach.

Instead of trying to squeeze more from flash, StorONE changes the architectural model, reducing structural dependency on flash while preserving its performance value. The 9x ROI on Flash program is designed for this moment:

**when capacity growth, price volatility, and infrastructure risk converge.
This is not a feature. It is a structural shift in storage economics.**

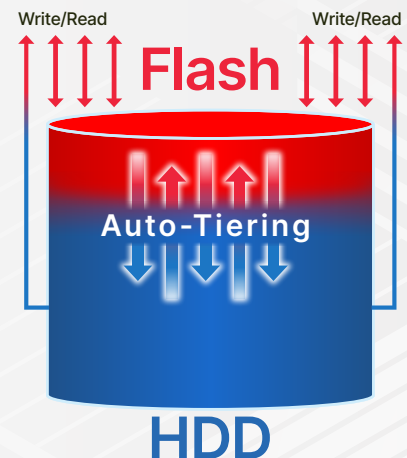
1. The Flash Crisis Is Structural - Not Temporary

Flash/NAND production depends on multi-year fab cycles and concentrated supply chains. Price volatility and capacity constraints are structural realities.

All-flash architectures create:

- Cost shock during price spikes
- Artificial capacity ceilings
- Deep dependence on a single media type

**The issue is not how to “optimize flash.
The issue is how to stop being dependent on it.**





2. The 9x ROI on Flash Program

The program enables organizations running all-flash storage to:

- Add a lower-cost HDD tier
- Automatically manage real-time data placement
- Achieve up to 9x effective capacity
- Preserve all-flash-class performance for active data

No flash replacement
No application changes
No vendor lock-in

Maximum value from existing assets

3. Redeploying Existing All-Flash JBOD

Organizations that already own all-flash JBODs can:

- Reinstall them under StorONE software
- Use them as the Flash Performance Tier
- Add an HDD Capacity Tier
- Transform standalone flash into a unified, scalable system

The original flash investment becomes the performance engine, not stranded capacity.

4. Real Capacity Expansion - Not Statistical Data Reduction

Many storage vendors promise “effective capacity” through:

- De-duplication
- Compression
- Statistical reduction techniques

These depend on data type and require significant CPU and DRAM, creating what we call the Reduction Tax.

StorONE's 9x ROI is structural, not probabilistic.

Capacity expansion is achieved by intelligent data placement, independent of compressibility and without heavy memory overhead.

5. Smart Auto-Tiering in Real Time

At the core of the program is StorONE's real-time Smart Auto-Tiering engine.

It ensures:

- Continuous placement decisions
- No scheduled rebalancing windows
- No manual policies
- No disruptive migrations

Hot data remains on flash.

Warm and cold data moves automatically to HDD.

Promotion and demotion are transparent and continuous.

6. Tier-One Performance at Tier-Two Cost

The system delivers:

- Flash performance for active workloads
- HDD economics for the majority of data
- Ongoing cost optimization, not one-time savings

Organizations achieve enterprise performance without enterprise flash expansion.

7. Simple, Hardware-Agnostic Deployment

The program requires one architectural action:

Add an HDD tier.

StorONE is fully software-defined and supports:

- Any server vendor
- Any disk vendor
- Any disk size
- Independent scaling of flash and HDD

There are no hardware constraints and no future expansion lock-ins.

8. Expanded Use Cases Without Redesign

By increasing effective capacity up to 9x, organizations can:

- Run more applications on the same system
- Consolidate primary, secondary, and backup storage
- Extend retention periods
- Add new workloads without launching new infrastructure projects

Flash is preserved for performance, not wasted on cold data.

9. Enterprise-Grade Protection and Integrity

The program includes StorONE's full protection architecture:

- Direct-to-disk writes (cacheless architecture)
- No DRAM dependency
- Up to 100,000 immutable snapshots
- Built-in retention and instant recovery
- Data movement within the same system and volume

Real-time tiering never compromises integrity.

10. Simple, Hardware-Agnostic Deployment

If every flash drive you already own could deliver nine times more effective value, storage would return to its natural place within the organization.

Projects would move forward without budget shocks.

Infrastructure decisions would not depend on flash price swings.

Capacity growth would no longer require flash expansion.

The 9x ROI on Flash program enables organizations to bypass the flash bottleneck - today.