

SOLUTION BRIEF

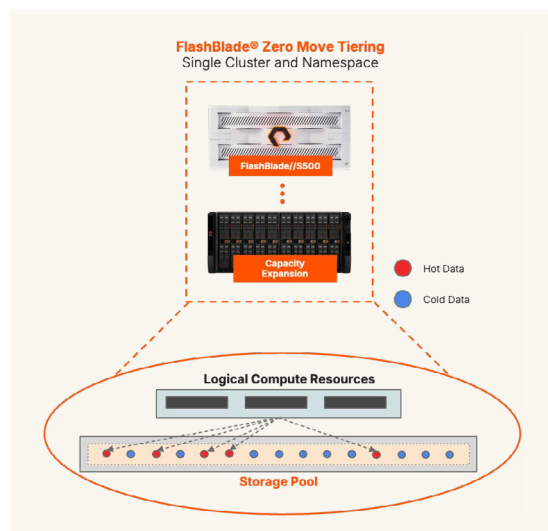
Eliminate Inefficiencies of Data Movement Between Tiers with FlashBlade Zero Move Tiering

Eliminate legacy data tiering limitations and power modern file and object workloads with intelligent data management.

The Pure Storage FlashBlade® Zero Move Tiering solution transforms data management with intelligent resource allocation, delivering unmatched performance, cost efficiency, and infrastructure agility for modern workloads.

Ongoing Challenges with Legacy Tiering Solutions

In today's fast-paced IT landscape, organizations need a storage solution that adapts to evolving workload requirements and simplifies access to all data, powering key enterprise initiatives. Legacy storage systems, with their complex tiering capabilities, require data to be placed across fragmented infrastructure silos (e.g., all-flash, hybrid, and disk). This legacy approach creates complex data lifecycle management policies, adding unnecessary latency, cost, complexity, and capacity overheads in most large enterprises with tiered storage environments. This leads to poor end-user experiences and stretches IT budgets. Customers today are looking for a storage platform that can deliver unparalleled agility to meet their organization's performance and total cost of ownership (TCO) requirements.



Meet FlashBlade Zero Move Tiering

FlashBlade Zero Move Tiering by Pure Storage offers a groundbreaking approach to data management, enabling intelligent data access across heterogeneous all-flash clusters that optimize both performance and cost (see image in this page). This revolutionary solution does not require the data to move and ensures seamless access to both hot and cold data, providing unmatched benefits, including

improved performance predictability, enhanced infrastructure agility, and improved cost efficiency. All of this is available without any additional capacity overheads.



Performance Predictability

Dynamic resource allocation to intelligently serve data requiring high performance.



Cost Efficiency

Handles the performance needs of both hot and cold data without complexity and management overhead.



Infrastructure Agility

Transition workloads to lower performing storage classes seamlessly and prioritize new mission critical workloads.

Improved Performance Predictability

With FlashBlade Zero Move Tiering, data requiring high-performance access receives priority for system resources, while older, less frequently accessed data remains accessible without complex data movement. This ensures that workloads can achieve best-of-breed, consistent, and predictable performance that outperforms equivalent competitive offerings by delivering significantly higher IOPS per dollar. FlashBlade Zero Move Tiering dynamically optimizes system resources and capacity for performance workloads and archive data. It achieves this through policy-driven identification of hot or cold data based on file age, enabling efficient data management without any data movement.

Enhanced Infrastructure Agility

FlashBlade Zero Move Tiering allows for instantaneous transition of workloads to lower-performing storage class, making room for new mission-critical workloads. This enhances the system efficiency without requiring customers to devise complex data movement policies, ensuring that data access is simplified and new mission-critical workloads can be prioritized seamlessly. Customers don't have to worry about complicated node-based data movement licenses, making the purchase and deployment process straightforward. A seamless policy-driven process is available to provide differentiated access to files within a filesystem based on their last access or modification timelines.

Improved Cost Efficiency

FlashBlade Zero Move Tiering reduces the management overhead by eliminating the need to manage multiple systems or tiers and moving data across them. This results in a compelling total cost of ownership (TCO) that is significantly lower than comparable competitive storage offerings with clusters consisting of all-flash, hybrid and archive nodes. With Zero Move Tiering, customers have to only manage a single all-flash namespace with customizable configurations that eliminate the need to set up and manage separate environments and handle the different failure rates for hot and cold tiers.

Configurations

FlashBlade framework is available in multiple configurations ranging from 3375TB to 42PB raw capacity in a single namespace. These configurations are available with different proportions of capacity tiers to provide flexibility to our customers in terms of infrastructure planning.

Zero move tiering configurations are made up of FlashBlade//S500 nodes, catering to the "speed" storage class (hot storage) and FlashBlade expansion nodes, directed towards the archive (cold) storage class. While the speed storage class comprises 37.5TB DirectFlash® Modules, the archive storage class offers a choice of 75TB or the industry leading 150TB DirectFlash Modules, further optimising data center rackspace footprints and power efficiency. Granular capacity expansions are available that can be performed non-disruptively to account for growing capacity needs.

Minimum Configuration	2 Nodes: 3375TB (raw) 1 FlashBlade//S500 Nodes: 375TB (raw) 1 FlashBlade Expansion Nodes: 3000TB (raw)
Maximum Configuration	10 Nodes: 42000TB (raw) 4 FlashBlade//S500 Nodes 6000TB (raw) 6 FlashBlade Expansion Nodes 36000TB (raw)
DirectFlash Modules Supported	FlashBlade//S500 Nodes: 37TB DFMs FlashBlade Expansion Nodes: 75TB, 150TB DFMs
Scalability	Scale by ½ Node Increments



Conclusion

FlashBlade Zero Move Tiering by Pure Storage is a revolutionary solution that addresses the evolving needs of modern enterprises. By providing a unified, intelligent data management capability, it ensures that organizations can achieve the performance, agility, and cost efficiency required to stay competitive in today's data-driven world.

With FlashBlade Zero Move Tiering, customers can simplify their data access, reduce costs, and enhance overall performance, making it an essential tool for any modern IT infrastructure.

Learn More

 **FlashBlade//S™**

 **FlashBlade//E™**

purestorage.com

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