

SOLUTION BRIEF

Real-time Enterprise File Powered by the Pure Storage Platform

Make your data immortal with scalable, flexible, future-ready file services.

Modern applications need agility that yesterday’s traditional file systems weren’t built to support. Today’s rate of change requires a solution that can dynamically change, adapt, and reconfigure in real time. Real-time Enterprise File is purpose-built for an era of rapid change and is flexible enough to handle future workloads, whatever they may be.

Traditional File Services: Rigid, Complicated and Hard to Manage

Over time, traditional file systems have become increasingly burdensome to manage. Managing them can be incredibly complex, resulting in more overhead, infrastructure bottlenecks and silos, increased cyber risk from complex layered architecture, and limited agility that makes upgrades and changes painful.

The figure below illustrates how traditional file services can create complexity in an environment supporting multiple file workloads with different performance requirements. Scaling is achieved by adding silos, increasing time spent planning, all for an environment that may not be appropriate for high-performance computing and AI. As requirements change and workloads are introduced, IT must add file storage in a reactionary—not proactive—fashion.

	ANALYTICS	USER & HOME DIRECTORIES	BACKUP & ARCHIVE	VIRTUALIZATION	HPC & AI	FUTURE
ARCHITECTURES & MANAGEMENT						
CAPACITY						
PERFORMANCE REQUIREMENTS						?
REFRESH	3 years	3 years	5 years	2 years	1 year	?
MEDIA	Hybrid	Disk	Disk	Flash	Flash	?

FIGURE 1 Traditional, rigid infrastructure with silos



Simple and Scalable Management

- Consistent experience and enterprise-grade data services
- Single virtualized storage pool without configuration lock
- Leverage automation with API, CLI, or GUI



Native Agility with Guaranteed SLAs

- Never over-or-under purchase storage
- Upgrade in-place non-disruptively
- Rely on guaranteed SLAs
- Simplify ownership with always-improving software and hardware



Cyber Resilient and Efficient

- Smart recommendations for policies and optimization
- Eliminate manual errors from routine operations
- Always backwards compatible

A New Approach

The reality is no traditional file service is capable of supporting changes at today's rapid pace. Today's infrastructure evolved from single systems supporting single workloads, scaling up with capacity or scaling out to meet changing requirements. To deal with this rigidity, organizations have adopted several strategies, like the "science project" single-purpose dedicated solution maintained by internal experts, or shadow IT where teams use their own resources to spin up cloud environments for dev/test. All of these scenarios are stopgaps to deal with a rigid file solution that doesn't quite meet their environments' needs.

A modern solution needs to be flexible and non-disruptively scalable. Flexibility ensures that new and rapidly changing requirements can be serviced so that new business initiatives are not stalled, eliminating the need for shadow IT. Non-disruptive scalability means that new workloads can be supported in existing environments—without resorting to silos or single-purpose dedicated storage to avoid downtime.

Real-time Enterprise File Services: Be Future-ready

Real-time Enterprise File from Pure Storage® is a revolutionary new approach to file services. Purpose built for today's rapidly changing world, it eliminates the need to predict the future and instead offers the flexibility to adapt to tomorrow's needs without having to overinvest or compromise to meet today's objective. File data is immortal, unconstrained by silos and changes in the environment, and without risk of downtime from upgrades.

Simplified Management at Scale

Traditional file systems can be rigid once they are configured, making them difficult to adapt to changing requirements.

Real-time Enterprise File is resourced from a single virtualized storage pool that can flexibly meet the most demanding performance requirements. All storage is powered by a PurityOS, a common operating system, which ensures a consistent experience of enterprise-grade data services.

Supporting a variety of workloads with different performance requirements and configurations doesn't have to add more manual steps. Automation unlocks the ability to scale without introducing complexity or additional overhead. Real-time Enterprise File can use the unified management of PurityOS to leverage automation with either APIs, CLI, or GUI. You can quickly provision, adjust, and scale storage in real time across an entire fleet without having to worry about misconfiguring settings like QoS or data protection policies. This allows infrastructure teams to rapidly respond to requests while reducing human error.

Native Agility and Guaranteed SLAs

Attempting to predict growth can lead to over- or under-purchasing storage, even with the most meticulous planning. A future-proof data strategy can be achieved with a flexible consumption model that's backed by an architecture that supports growing non-disruptively. Real-time Enterprise File is available on FlashArray and FlashBlade, which can be purchased with a Pure Storage Evergreen//One™ or Evergreen//Forever™ subscription model. Both models are the only consumption models built on Pure Storage Evergreen® storage architecture, which allows Real-time Enterprise File to be upgraded non-disruptively:

- Evergreen//One is a managed service, providing guaranteed SLAs for storage. You can flexibly consume storage and scale seamlessly as easily as the public cloud.
- Evergreen//Forever provides a traditional storage offering with a subscription to innovation. It simplifies ownership with always-improving storage software and hardware, delivered non-disruptively and with data in place. Buy once and keep modern virtually forever.



Eliminate Legacy Data Tiering Complexities

Gain the benefits of tiering hot and cold data without the typical CAPEX, space, and operational burdens. With Zero Move Tiering for Pure Storage FlashBlade®, managing classes of storage is handled behind the scenes. Available in multiple configuration options, it continuously balances workload data across multiple performance storage classes—within the same namespace and without requiring data movement between tiers. This eliminates complex data management policies, unpredictable performance, and additional latency due to reassembly of blocks.

Cyber Resiliency

As infrastructure changes and grows, routine maintenance, optimization, and managing security policies can be tedious or even overlooked. The Pure Storage platform can handle many common security and optimization tasks, and provide smart recommendations in the background. Real-time Enterprise File is native to PurityOS, so required updates and fixes are backwards-compatible and do not require planned downtime.

Infrastructure Efficiency

Traditional file systems have to employ multiple types of storage media in order to meet performance requirements, from hard disk drives to high-performance flash. Real-time Enterprise File is built on a foundation of Pure Storage DirectFlash® Modules, the evolution of commodity solid-state drives. It can deliver superior efficiency, density, and performance with a design that's optimized solely for enterprise storage.

Achieve Storage Peace of Mind

Supporting the rapidly changing requirements of today requires flexibility that isn't built into yesterday's file solutions. Only a truly unified storage pool that can flexibly serve multiple performance requirements will ensure painless onboarding of future workloads. A consumption model that ensures a non-disruptive evolution of storage that's built on modern storage media will allow your organization to focus on driving outcomes, rather than wasting time in planning and storage management. Allowing a global pool of storage that scales and flexes to meet all performance requirements, built on a bedrock of high performance DirectFlash ensures that silos are a thing of the past.

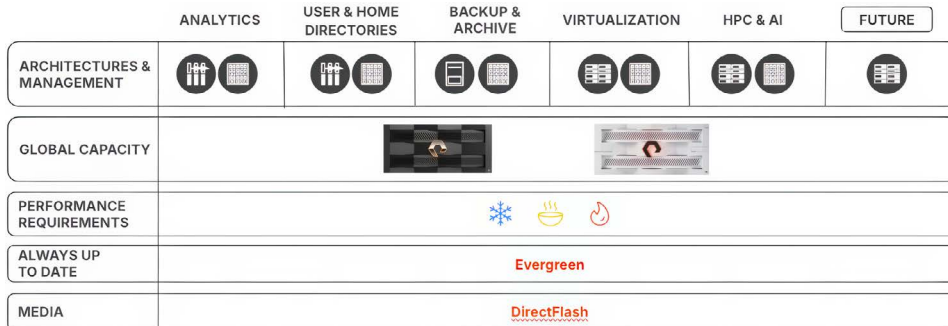


FIGURE 2 Real-time Enterprise File eliminates silos

Additional Resources

- Read more about [Real-time Enterprise File](#).
- Watch the [webinar](#) on how Real-time Enterprise file can help unlock your organization's potential.

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