

FlashBlade 3.0: The Solution for Modern Unstructured Data



[FlashBlade](#) is the first high-performance, cloud-optimized file and object storage platform capable of storing, managing, and meeting the needs of the modern application data that powers digital transformation. FlashBlade uniquely solves for multi-dimensional performance, agility, and simplicity with the efficiencies of public cloud, but in your data center.

With the release of Purity 3.0 for FlashBlade, Pure continues to invest in the incredible momentum of the FlashBlade platform. In the three years since the initial launch of FlashBlade, Pure has delivered on a continuous commitment to innovation. Our teams are focused on improving the enterprise maturity of the FlashBlade platform by delivering key capabilities to address your unique challenges.




We've consistently improved the hardware and software stacks that deliver unified fast file and object storage—from the initial 15-blade chassis to today's full 10x scale to up to 150 blades. On the software side, Purity 3.0 for FlashBlade (Purity//FB 3.0) delivers continued growth of features and functions. Based on customer feedback, we've addressed the biggest challenges across use cases including ransomware, modern data protection, modern analytics, artificial intelligence, and DevOps/application development.

Performance, Agility, Simplicity

We architected FlashBlade to align with three foundational characteristics. Performance, agility, and simplicity are commonly considered part of the value proposition of public cloud. Today, organizations want the same characteristics of on-prem storage as they shift toward digital transformation and supporting the next generation of cloud-focused applications.

Performance

FlashBlade provides a strategic advantage by delivering linear, predictable performance while scaling to deliver tens of billions of files and objects. The ongoing massive growth of data requires a high-performance storage foundation to support the high throughput and low latency of modern applications. This means all-flash fast object and file storage.

	<p>Tuned for everything: From small and metadata-heavy to large streaming files, FlashBlade is designed to deliver maximum, uncompromised performance. FlashBlade offers predictable, ultra-fast performance for any access pattern, whether random or sequential. Long gone is the need to fine-tune a system to specific workloads. Pure built FlashBlade to take on whatever you want to throw its way—and more.</p>
	<p>Multi-dimensional performance: All-flash storage offers significant performance increases over traditional disk-based arrays and direct-attached storage (DAS). FlashBlade takes the performance improvements a few steps further with multi-dimensional performance that spans data sets and sizes. Small files, large files—no problem. Hundreds of files? Thousands, millions? FlashBlade treats all of them as first-class citizens in the performance spectrum.</p>
	<p>Massively parallel: Modern distributed systems are designed to work together to solve some of the world’s most complex challenges, such as climate change, financial forecasting, medical research, and genetic sequencing. FlashBlade leverages massive parallelism to increase performance across all aspects of computational storage. This level of parallelism contributes to massive performance that scales with the system.</p>

Agility

FlashBlade allows you to adapt to the constant flux of workload changes and operational requirements that shift from day-to-day—and hour-to-hour—without compromise. Enabling application development calls for the adoption of more DevOps and software-focused practices. The programmatic approach to these new challenges requires a rich set of RESTful APIs that integrate with the desire to deliver infrastructure as code.

Additionally, more organizations want operational states that mimic public cloud—cloud efficiencies with a truly scale-out storage foundation. The underpinnings of modern applications include support for a broader range of applications with unified file and object support as well as common protocols.



Programmatic multi-protocol: Taking advantage of IP-based storage in your environment gives you access to multi-protocol support. FlashBlade provides native support for NFS, SMB, and Amazon S3 and lets you leverage them one at a time or in parallel. A full-featured RESTful API stack is also available for a more programmatic approach to modern application development and deployment.



Scale-out: FlashBlade is a truly scale-out platform designed to support modern workloads that require linear scalability and performance without trade-offs. It delivers a single namespace that can start as small as 119TB and scale up to 7.8PB, even before applying data-reduction techniques. Your initial investment can be as small as 7 blades in a single chassis up to 150 blades in a single rack.





Cloud efficiency: FlashBlade is cloud-ready storage and provides all the benefits of public-cloud services. Simplicity, elasticity, and scalability are all hallmarks of what makes public cloud attractive. FlashBlade provides those same characteristics for cloud-native and cloud-focused workloads in your own data center. While public cloud has many benefits for infrastructure use, you can use FlashBlade as the on-prem storage foundation to mimic the same benefits.

Simplicity

Simplify infrastructure management with disaggregated storage for greater efficiency and a lower TCO with Pure1®. It also gives you the ability to plan for capacity and performance needs. Pure1 is an AI-powered, data-storage-management engine that enables self-driving storage. It provides actionable intelligence so your teams can move away from the “gut feel” approach of ongoing storage management, and instead rely on data-driven insights into utilization and capacity requirements. Simplify operations with easy installation, easy upgrades, and no performance tuning requirements. Additionally, Pure1 allows you to maintain application uptime with 100% performance via maintenance operations, software upgrades, and capacity expansion.

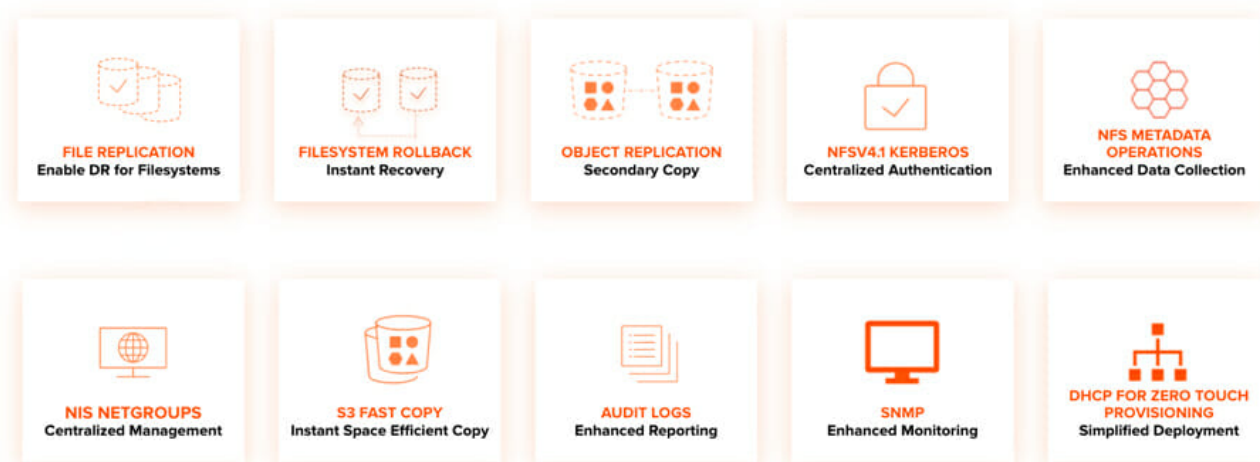


Evergreen: The Pure Evergreen™ storage program helps ensure that your FlashBlade stays fresh and modern, allowing you to perform ongoing software and hardware upgrades non-disruptively. No forklifts required.

	<p>Pure1: Pure implements AI across its portfolio to provide a level of predictive support that uses actionable intelligence to alert you and Pure Support teams of potential problems before they arise. You're notified of problems before they occur and Pure Support services proactively addresses them.</p>
	<p>Networking friendly: Unlike many other scale-out solutions, FlashBlade comes with built-in networking. Interconnectivity inside of the chassis can span to multiple chassis. This significantly decreases complexity and cost by eliminating the need to connect each individual node to the core switch or network.</p>

What's New with Purity//FB 3.0?

Purity//FB 3.0 Overview



Purity//FB 3.0, the scale-out software that powers FlashBlade, delivers the same simplicity and ease-of-use of the new capabilities that customers have come to love and expect from FlashBlade. Pure as-a-Service™, a true OPEX model¹, allows you to implement FlashBlade via a flexible-consumption model. Purity//FB 3.0 delivers capabilities to address unique challenges including:

- **File replication:** Enables disaster recovery of file systems. Read-only data in the target replication site enables data validation and DR testing.
- **Object replication:** Replicating object data between two FlashBlades improves the experience for geographically distributed users by both providing lower access latency and increasing read throughput. Replication of object data in native format from FlashBlade to Amazon S3 delivers cloud mobility. Use the cloud for a secondary copy or use public-cloud services to access data generated on-premises.

- **Filesystem rollback:** A crucial file system data protection feature, Filesystem Rollback enables the fast recovery of file systems from snapshots.
- **NFS v4.1 Kerberos:** Kerberos delivers an advanced level of security by authenticating users connecting to NFS v4.1 file systems on FlashBlade.
- **Audit logs and SNMP support:** Improved security, alerting, and monitoring capabilities provide key enhancements to enterprise readiness.

Conclusion

As the industry's first high-performance, cloud-optimized file and object storage platform, FlashBlade has seen a growing and diverse set of deployments that represent the most cutting edge of business and technology. FlashBlade's unique ability to accelerate modern applications and enable shared data across workloads addresses our customers' pain points in a way that, frankly, our competitors can't replicate. Our success is powered by the continued dedication to innovation that's in our founding DNA. The new Purity//FB 3.0 is just another step in this direction.

Get more information about Pure FlashBlade.

Read the [Purity//FB 3.0 press release](#).

¹**OPEX treatment is subject to the customer's auditor review.**