# **Building Modern Data Architectures**

Obtain more value from your data—with FlashBlade<sup>™</sup> from Pure.





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### **Overview**

As the amount of data multiplies, the challenges of managing this data have multiplied, too. Data now has to be put into the hands of more decision makers. It needs to be used to speed new services and manage compliance. It must be available to applications. It's particularly essential to deliver this data to modern analytics applications that transform IT operational efficiency, boost security, and improve business operations and customer experiences. And customers need to be able to choose where this data is analyzed (close to the data source, or moved as needed).

Right now, as more organizations go through digital transformation, they're struggling with an ever-increasing amount of unstructured data. This data is coming from sensors, logs, video, and text forms, as well as from the modern applications they've upgraded to.

Until recently, organizations could rely on storage appliances that supported the needs of a single application or type of workload. However, many organizations are limited by how their legacy infrastructure is able to manage so much unstructured data. They must deal with higher costs, increased inefficiencies, and greater complexities. And with so much data trapped in storage silos, they're less able to meet their urgent business requirements.

Worst of all, they're unable to take advantage of modern analytics applications. A data architecture that enables the potential for analytics must be simple so that it can adapt to massive data growth and ever changing data profiles. It must power analytics by with consistent, scalable performance that speeds more than just applications; but that helps speed time to insight. It must extend organizational agility by keeping IT teams productive and able to apply technology to business requirements for compliance and policy.





# **Enter Unified Fast File and Object (UFFO)**

Modern data requires a new category of storage to deliver high performance at scale, enhance IT agility, and reduce management complexity.

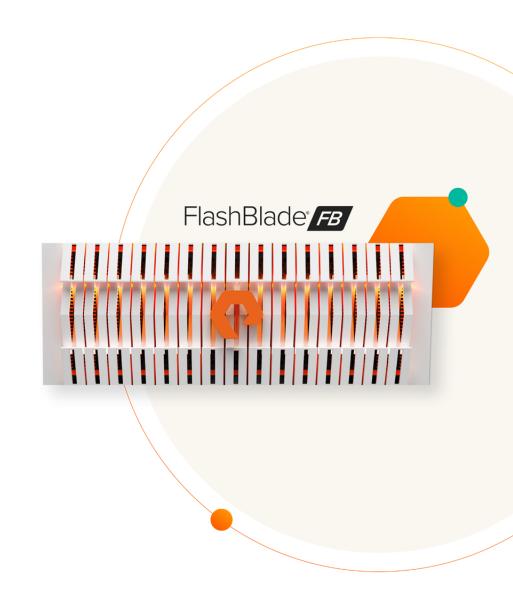
This new category is Unified Fast File and Object, or UFFO.

And FlashBlade, from Pure, is the industry's leading UFFO storage platform.

FlashBlade is engineered to deliver the simplicity and multidimensional performance that meets modern data needs, and powers unstructured data workloads. Its revolutionary speed helps organizations derive more business value from their data more quickly and accelerate the time to insights derived from data analytics.

These capabilities are key to addressing the needs of modern data architectures that support the rapid delivery of microservices and new applications such as advanced analytics. FlashBlade scales to retain, protect, and deliver massive amounts of unstructured data from a single platform to consolidate silos and infrastructure. High performance and built-in simplicity help organizations simplify operations so that they can spend more time focused on delivering insights, not just managing data.

The following pages demonstrate how this advanced storage platform enables transformation to modern data architectures.





#### **Easier and Faster Rollout of New Data Services**

FlashBlade, the leading UFFO storage platform, offers scale-out, disaggregated storage that's easy to install, scale, and upgrade. It simplifies deployments, and makes it easy to scale for new data needs and the rapid deployment of new services.

FlashBlade can unlock more data, and put it into more hands. It can run modern applications with cloud-optimized, cloud-ready storage. And it can support multiple analytics tools from ingest to visualization, for real-time results at any scale, for both structured and unstructured data

**Adapt to More Modern Data** 

With FlashBlade, there's no need for constant performance tuning, repeated storage management operations, complex manual processes, or deep expertise.

It provides a single, "tuned for everything" platform that:

Consolidates silos and pipelines

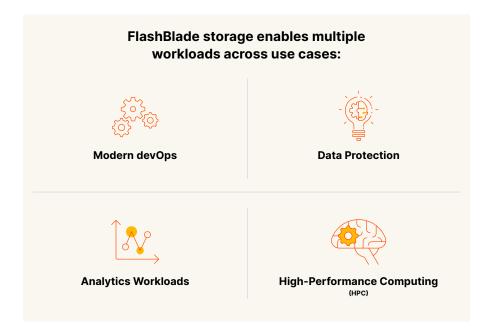
Enables the agility to adapt to changing data profiles

Provides flexibility for modern applications
with native file and object support

Organizations can avoid duplicating data across silos or using point products by using a single scale-out platform for multiple workloads and data profiles.

FlashBlade adapts to workload changes with any data size, type, structure, or access pattern with always fast performance—eliminating the need to constantly tune infrastructure.

FlashBlade's scale-out, architecture can handle tens of billions of files and objects, while delivering maximum, real-time performance, plus rich data services. This cloud-optimized architecture enables more applications to access data, through native file and object support. This scalability offers the ability to analyze more on-premises data where it's generated, to improve compliance and governance for edge, IoT, and critical business workloads.



FlashBlade can efficiently host multiple analytics applications, concurrently support large user populations, easily scale with data growth, and eliminate the complexity of siloed approaches.



#### **Protect Data and Investments**

UFFO accelerates decision making, while protecting investments through adaptable architectures. This platform can be used for adding and migrating to workloads, with native object data profiles and protocols. Deploying a cloud-optimized UFFO storage platform, such as FlashBlade, with different support helps you migrate to and deploy more modern applications with confidence. It easily scales up or down, and protects raw and subsequent processed data.

This resilient platform ensures rapid recovery, ransomware recovery, and business continuity, with the investment protection to grow and scale-out as necessary, without diminishing capacity or performance. It also integrates with data protection partners, for an extra level of safety and security.

With Pure, you have a choice of CAPEX and OPEX consumption to match the needs of your business model. A subscription model like Pure Evergreen™ program simplifies purchasing and upgrades, keeps your platform modern without having to rebuy TB you already own. Pure as-a-Service is an OPEX-based1, pay-as-you-go storage-as-a-service (STaaS) offering that transforms your enterprise storage environment into a highly efficient storage utility.

#### Collect and Deliver Data From a Single, Scalable Platform

FlashBlade consolidates modern, workloads with existing ones, providing a single storage platform. It removes tiering while scaling from terabytes to petabytes—as easily as adding new blades.

FlashBlade's high-throughput systems speed performance at any scale, for complex queries and searches of large sets of historical data. It streamlines operations by providing a simple-to-use, disaggregated storage infrastructure. And its self-driving, simplified manageability makes capacity planning faster and easier.

Organizations gain multi-dimensional, scale-out performance from a highly parallelized architecture for every workload and file size, type, and scale. FlashBlade dynamically scales for multiple workloads and variable data patterns, and provides cloud-like agility for any unstructured data.

Organizations can take advantage of this platform to build on-prem clouds, and modernize data warehouses and data lakes. And they gain all this—starting with a small, 4U form factor that can scale to 150 blades. It dramatically shrinks the storage footprint, and reduces networking complexity and expensive network switches and ports.

FlashBlade removes tiering while scaling from terabytes to petabytes— as easily as adding new blades.



<sup>1</sup> OPEX treatment is subject to customer's auditor review.



#### **Power Better Decisions and Gain Insights—Faster**

Data analytics is the key to unlocking critical insights for any organization. FlashBlade enables real-time analytics, through a modern architecture that ingests data faster with high throughput.

Speeding up search and query, with high-performance, all-flash access that helps enable more data insights—in real time, FlashBlade also increases staff productivity,through faster data search, indexing, and analysis.

And FlashBlade lets organizations take advantage of a new generation of applications that allows them to gather new insights from their rapidly increasing data assets. They can eliminate delays from legacy batch-analytics systems, overcoming silos, warehouses, and lakes that slow insights, restrict innovation, and complicate IT operations.

#### Work Smarter—With Al

A data storage foundation that is made simple enables IT administrators and Architects to spend more time focused on innovation and business needs.

FlashBlade's "no tuning required" simplicity makes it easy to deploy, easy to upgrade, and easy to operate. This simplicity also included nondisruptive performance through maintenance operations, capacity expansion, and software upgrades.

FlashBlade also offers self-driving storage, plus predictive support and planning for capacity and performance needs, through Pure1. And it centralizes cloud management and support, too. This Al-powered, data-storage management engine enables organizations to consume IT resources to fit their business needs. And Pure1 allows Pure's support teams to proactively identify and resolve issues before they become outages.

#### **Technology That Enables Agile Business Policies**

FlashBlade, as the leading UFFO storage platform, enables matching more of your technology to business policies by providing infrastructure and data agility.

Deploying a single, scale-out system for unstructured data simplifies management of data governance and lineage. You can achieve greater choice to analyze your data either on-premises or at multiple sites without adding technology silos through native object storage support. This cloud-optimized platform enables your organization to align more business critical workloads with onpremises compliance requirements. And a highly concurrent platform means that more teams can access a single data source for analytics, in real-time. Finally, OPEX and CAPEX consumption options help match changing data requirements to your business model. Pure as-a-Service offers an OPEX-based, pay-as-you-go storage-as-a-service (STaaS) offering that transforms your enterprise storage environment into a highly efficient storage utility.





### Resources

#### **Data Analytics Solutions**

Learn more about how a modern data experience can enable your IT organization to maximize the value of your data assets through analytics.

www.purestorage.com/analytics

#### **Unified Fast File and Object Storage**

Learn more about FlashBlade, the leading UFFO storage platform.

www purestorage com/flashblade

