FLASHBLADE: SCALE-OUT STORAGE FOR MODERN DATA

SUMMARY

Data is the most valuable asset in an organization today. However, slow and complex legacy storage systems often hold data back from being put to use. FlashBlade is the industry's most advanced file and object storage platform ever, consolidating data silos — like backup appliances and data lakes — to accelerate tomorrow's discoveries and insights.

RETHINK STORAGE IN THE ERA OF MODERN DATA

There are two types of storage systems. One is optimized to store data. The other is optimized to deliver it. One is engineered with legacy technologies, like spinning disk or retrofit software. The other is a modern system, architected from the ground up to be massively parallel, thus eliminating serial bottlenecks that hold data back. This modern storage is FlashBlade™ from Pure Storage.

MODERNIZE EVERYTHING — FROM BACKUP APPLIANCES TO DATA LAKES

From artificial intelligence to analytics, data is at the center of today's innovation. Organizations are often hindered by legacy infrastructure, which prevents their data from moving at the speed of their business. FlashBlade is the industry's most advanced scale-out storage, architected to accelerate modern workloads and simplify infrastructure.

Accelerate AI data pipeline while keeping GPUs fully utilized

Restore data rapidly to meet SLAs for disaster recovery

Shorten design cycles in EDA by eliminating data bottlenecks

Consolidate data warehouses and data lakes for simplicity and real-time performance

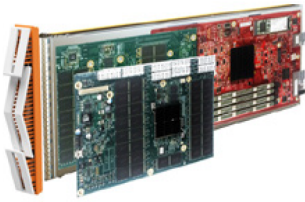Meet ever-growing demands of modern DevOps environments

Unleash data-intensive simulations from genomics and finance workloads

*"Pure Storage FlashBlade is about **10 times faster out of the box, with no specific tuning or effort.** It enabled us to boost our GPU from about 20% average utilization to close to 100% utilization."*

— **JEREMY BARNES**, *CHIEF ARCHITECT*

ELEMENT AI

PURESTORAGE®

FLASHBLADE – POWERED BY THREE INDUSTRY FIRSTS

BLADE

Compute and network integrated with DirectFlash™ technology – each blade can be hot-plugged into the system to add capacity and performance.

PURITY//FB

The heart of FlashBlade, architected on a massively distributed key-value pair database for limitless scale and performance, delivering enterprise-class data services and management with simplicity.

ELASTIC FABRIC

Powered by a proprietary object messaging protocol for fastest communication to flash, the low-latency converged fabric delivers a total bandwidth of 320Gb/s per chassis with 8x 40Gb/s ports.

REPLACE RACKS OF LEGACY TECHNOLOGY WITH FLASHBLADE

FlashBlade delivers unprecedented performance in a small form factor. It is tuned to deliver multi-dimensional performance for any data size, structure, or access, delivering 10x or greater savings in power, space, and cooling costs.

"*FlashBlade is just 4U, but provides the same performance as 50 racks of our legacy storage sitting in the same data center. It's extraordinary.*"

— **JIM DOLAN**, *MANAGER, HPC WORLDWIDE SUPPORT*

50 RACKS OF DISK TO 4U

PURESTORAGE®

EVERYTHING YOU EVER WANTED IN A DATA PLATFORM

Some storage alternatives claim to be performant, but are complex to deploy. Others promise large capacity, but deliver data slowly. FlashBlade is the first scale-out storage solution to intersect on all three dimensions of big, fast, and simple.

FAST
- Elastic performance that grows with data, up to 17 GB/s
- Always-fast, from small to large files
- Massively parallel architecture from software to flash

BIG
- Petabytes of capacity
- Elastic concurrency, up to 10s of thousands of clients
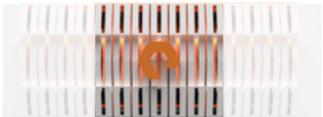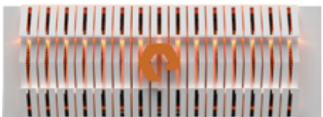- 10s of billions of objects and files

SIMPLE
- Evergreen™ – don't rebuy TBs you already own
- "Tuned for Everything" design, no manual optimizations required
- Scale-out everything instantly by simply adding blades

SPECIFICATIONS

		17 TB BLADE	52 TB BLADE
7 BLADES		190 TBs Usable	591 TBs Usable
15 BLADES		525 TBs Usable	1607 TBs Usable

* Usable capacity assumes 3:1 data reduction rate. Actual data reduction may vary based on use case.

PERFORMANCE
- 17 GB/s bandwidth with 15 blades
- Up to 1.5M NFS IOPS

CONNECTIVITY
- 8x 40Gb/s or 32x 10Gb/s Ethernet ports / chassis

PHYSICAL
- 4U
- 1,800 Watts (nominal at full configuration)

*"Our quants want to test a model, get the results, and then test another one – all day long. So a **10-20X improvement in performance is a game-changer** when it comes to creating a time-to-market advantage for us."*

*— **GARY COLLIER**, CO-CTO*