

UNIVERSAL STORAGE FOR

ANIMATION AND VFX



RENDER AT THE SPEED OF FLASH... SPEND AT THE COST OF AN ARCHIVE.

Animation and VFX studios use rendering tools to shape today's most compelling content. I/O performance can directly correlate to the speed of content production by making both server farms and creatives more efficient with their time. Fast forward to today...and rendering workflows are now being exposed to new machine learning and deep learning frameworks to automate much of the creative process by programmatically learning from artistic behaviors. To train these new models, organizations are finding that they need to provide high speed access to their content archives for high-throughput computation... a challenge for organizations who have kept their largest data sets on the slowest storage.

With VAST Data, animations studios and FX shops can finally afford flash for all of their render data. Once flash can be affordable for the pipeline, render farms can deliver at up to 10x times faster performance than HDD-based scale-out storage.

THE PYRAMID IS DEAD.

Large render farms have historically employed a number of storage systems and tiering strategies to balance cost and performance. As the transactional I/O workloads in render farms has outstripped the capability traditional scale-out NAS systems, studios have even band-aided these shortcomings by deploying exotic solutions such as file system caching appliances.

The complications of legacy NAS are on a collision course with AI and streaming requirements in modern rendering environments. To solve this problem, a new approach to storage architecture is required.

VAST'S KEY BENEFITS

All-Flash Performance

Maximize render performance across any data set, eliminate the complexity of file system caching solutions

Hard Disk Cost Efficiency

New storage concepts combine flash performance with the cost of HDDs

Multi-Tenant, Multi-Protocol

One exabyte-scale system can support many users and protocols, while providing dedicated quality of service for specific applications



THE BETTER OPTION: VAST DATA UNIVERSAL STORAGE.

VAST Data breaks the decades-old tradeoff between storage performance and capacity with a new storage architecture that enables unlimited processing on affordable flash, at up to exabyte scale. VAST's DASE architecture disaggregates the capacity provided by QLC flash from the performance provided by the stateless VAST Servers allowing studios to scale performance and capacity independently. Studios can also dedicate front-end servers—and the performance they provide—to their most critical projects.

Universal Storage delivers numerous advantages for rendering:

All-Flash Storage Infrastructure

Render up to 10 times faster when all of your data is on flash.

Revolutionary Data Reduction for Rendering Data

Similarity-Based Data Reduction routinely delivers reduction of 2.5:1 in render pipelines.

NAS Simplicity

One scale-out namespace eliminates the need for client agents, tiering appliances, and other complications.

Multi-Tenant Infrastructure

VAST server pooling capability provides dedicated QoS for competing projects... dedicate front-end servers—and the performance they provide—to their most critical projects.

Archive Economics, 1/10th the Cost of Other Flash Approaches

VAST delivers all-flash performance at the cost of hard drives through QLC flash protection, low-overhead erasure codes and revolutionary data reduction.

Accelerated Storage for Machine Learning and Deep Learning

Saturate any GPU server with VAST's simple, accelerated NAS offering.

Universal Storage Animation and VFX sample architecture

dedicate server pools for application QoS • scale performance and capacity independently

