WekaFS S3 Protocol

New S3 front-end protocol complements the existing back-end support for tiering to S3 based object stores, both on premises and in the public cloud

SPEED

Blazingly Fast S3 Performance

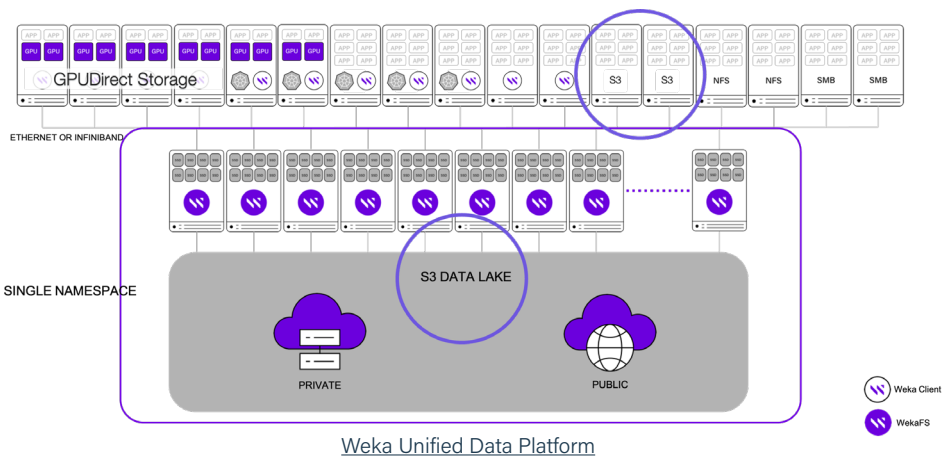**SIMPLICITY**

Uses Standard S3 Clients and Load Balancers

SCALE

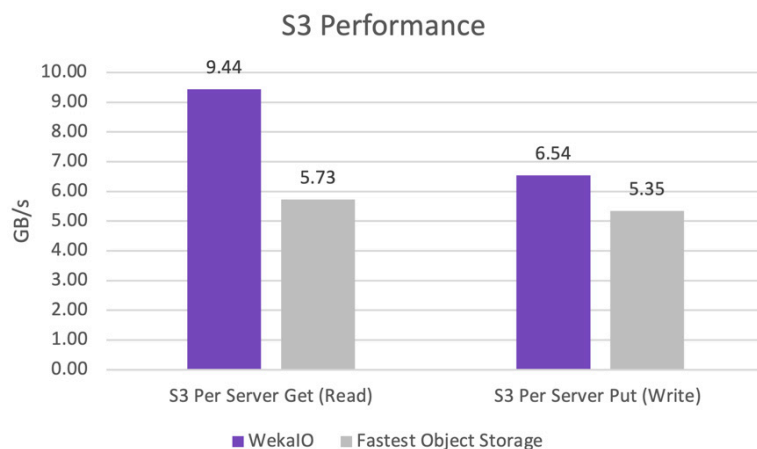Empowers a Zero-copy Data Platform for the Entire Data Lifecycle

CLOUD & ON PREMISES

Extends Native S3 Access for Fast Object Use Cases and Frameworks

WekaFS™ includes high-performance front-end support for Amazon's Simple Storage Service (S3) protocol, along with POSIX, NVIDIA GPUDirect® Storage, NFS, and SMB. Now with Weka, a single data lake can be accessed and shared across all protocols, allowing different users to securely collaborate on the data. WekaFS back-end support for tiering to S3-based industry-standard object stores is now complemented with our high-performance S3 front end, extending a fast S3 object namespace over durable, multi-cloud, high-capacity object storage.

[Weka Unified Data Platform](#)

BLAZINGLY FAST PERFORMANCE

Weka's S3 front end delivers the highest performance S3 experience, both on-premises and in the public cloud. Comparing WekaFS S3 performance with the industry-leading open source server for fast object storage, the solution delivers 60% more performance per server on average.

Weka S3 performance scales linearly as more servers are added to meet any performance requirement. Every Weka server can serve the S3 protocol (up to the total size of the cluster).

WEKA MULTIPROTOCOL SUPPORT EMPOWERS A UNIFIED DATA PLATFORM FOR THE ENTIRE LIFE CYCLE

Organizations use Weka as a zero-copy data storage platform to accelerate outcomes and gain competitive advantage. With Weka S3, customers can gradually move applications to S3 and access a single data repository via multiple protocols (POSIX, S3, SMB, NFS, GPUDirect Storage®). You can do all this while enjoying Weka's scale, performance, security and resiliency:

- Ingest data with S3 and then access the data with either S3 or any of Weka's other protocols.
- Expose existing data to S3 and migrate your application within the same data platform.
- Burst to the cloud and use new applications without the need to migrate your data.

USES STANDARD S3 CLIENTS WITH NO ADDITIONAL SOFTWARE NEEDED ON THE COMPUTE CLIENTS

It is easy to communicate with Weka storage. Users simply use standard S3 clients like Boto3. Weka S3 also supports standard client-side load balancers like Sidekick.

WEKA S3 HIGH-PERFORMANCE OBJECT STORE USE CASES

Weka S3 supports fast object use cases in addition to high-performance file system implementations for modern workloads and high-performance data analytics. Weka's S3 support extends the benefits of a parallel, distributed file system to cloud native applications that need strong consistency, multiprotocol access, enterprise grade features, along with and high performance and low latency, particularly for small objects.

- **New cloud native workloads and applications** – Strong consistency and the ability to handle tiny files with low latency enable fast object use cases like NoSQL DB's, cloud native applications, and cloud native data lake houses like Snowflake, etc.
- **Applications needing multiprotocol access** – Weka's ability to ingest data with S3 and expose it via POSIX, NFS, SMB, and GPU Direct make it ideal for deep learning, analytics, and IoT use cases.
- **Scale and ease of deployment** – Weka's performance scales linearly as S3 clients and S3 enabled storage nodes are added. Weka can be installed on any x86 based storage servers in 15 minutes, as well as being available in AWS EC2 instances.
- **Best economics** – Weka's data platform scales across both SSD and HDD media in a single namespace, providing fast object over NVMe flash and capacity object with HDD's.
- **Data consolidation with global namespace** – Weka provides a single global namespace, consolidating storage and eliminating data silos.
- **Hybrid cloud** – Weka extends the native S3 access both on-premises as well for AWS deployments, uniquely extending AWS S3 for fast object use cases and frameworks like AWS Sagemaker

WEKAFS: THE ULTIMATE HIGH-PERFORMANCE OBJECT PROTOCOL ACCESS

The Weka Data Platform now has fully compliant native S3 protocol access in-line with its multi-protocol capabilities – making it the ultimate high performance object protocol access! S3 access is in addition to POSIX, NFS, SMB, NVIDIA GPUDirect Storage and CSI plug-in. Weka has been able to demonstrate line-rate performance with S3 access for small object and file benchmarks with linear scalability.

TARGET MARKETS

Enables High Performance S3 Native Use Case
IoT Analytics
Health & Life Sciences
Media & Entertainment
Financial Services

INNOVATIVE & INTEGRATED

S3 API Support	
Buckets	HEAD/GET/PUT/DEL
Bucket Lifecycle	GET/PUT/DEL
Bucket Policy	GET/PUT/DEL
Bucket Tagging	GET/PUT/DEL
Object	GET/PUT/DEL
Object Tagging	GET/PUT/DEL
Object Multiparts	POST Create/Complete GET/DEL/PUT GET Parts

WEKA

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