

5 REASONS

To Deploy the WekaFS™ Modern File System in Your Cloud

Accelerating Discovery and Improving Outcomes With a High-Performance File System for the Cloud

WekaFS (Weka) is a modern file system that is uniquely built to solve big problems. It provides an easy-to-deploy, cloud-native, software-only storage solution with the best scale and performance to drive breakthrough innovations in Artificial Intelligence (AI), Machine Learning (ML), Life Sciences, and Financial Services, making high-performance computing (HPC) in the AWS cloud a reality.

Weka empowers you to leverage the cloud to address your specific needs based on workload, performance, and capacity requirements. Furthermore, Weka not only provides a high-performance storage solution but also greater overall benefits for your business:

- Achieve HPC application performance in the cloud comparable to the best that on-premises infrastructure can deliver
- Enjoy data center agility with seamless migration of workloads to the AWS cloud and back
- Provide full data center elasticity with on-demand cloud compute instances
- Optimize IT environments with a modern storage infrastructure and simplified storage management
- Leverage data transformation for AI, ML, Life Sciences, and Financial Services with faster analytics and technical computing for improved time to value and insight.

1 ELASTIC SCALING WITH CONSISTENT PERFORMANCE FOR COMPUTE-INTENSIVE WORKLOADS

WekaIO provides a shared accelerated storage platform that is ideal for running demanding enterprise and HPC workloads in the AWS cloud. WekaFS is a fully POSIX-compliant file system that transforms a collection of NVMe-based EC2 instances into a shared storage cluster, presenting a single namespace to the applications. Performance scales linearly as more EC2 instances are added, and can scale to 10s of millions of IOPS or terabytes/second of bandwidth at latencies as low as 250 microseconds.

2 MEET CHANGING APPLICATION NEEDS BY DYNAMICALLY OPTIMIZING STORAGE

With WekaFS, performance and capacity scale independently and dynamically. WekaFS is optimized for flash, so it is the ideal storage solution for mixed-use workloads that consist of large and small files with both random and sequential access patterns. WekaFS transparently tiers data to S3 for better economics and limitless scalability in a single namespace.

3 REDUCE RISK WITH ADVANCED DATA PROTECTION

WekaFS uses a patented data protection scheme to ensure the highest levels of availability, performance, and data resiliency. Backup your data by leveraging Weka’s snapshot capability to a secondary S3 bucket. Data can be fully encrypted from the application all the way to the storage tier with no performance degradation, and keys are protected with key management systems.

4 INCREASE IT AGILITY WITH ON-DEMAND RESOURCES

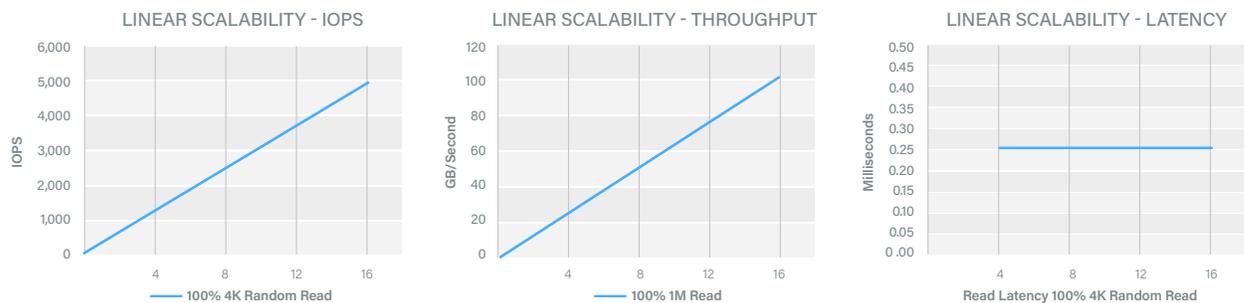
Running WekaFS in the cloud eliminates the need to buy extra infrastructure to service peak demand periods. Data can be moved from on-premises to the cloud and back. Spin up compute resources when you need them, run your jobs, and spin down when the job is done. Performance can be scaled up or down depending on application type or resource requirements. With Weka’s snap-to-object feature, all data remains accessible and protected in S3 storage.

5 HIGH-PERFORMANCE COMPUTING PERFORMANCE WITH APPLIANCE-LIKE SIMPLICITY

Setting up a high-performance storage system with WekaFS takes only a few clicks. There are no complicated parameters to tune as WekaFS is designed to handle small and large files equally well. The entire storage system can be managed from a simple-to-navigate interface and supports all the standard features you expect in an enterprise-grade file system.

FILE SYSTEM SCALES LINEARLY WITH CLUSTER SIZE

WekaFS exhibits linear scaling of performance as the cluster size increases — and the latency at scale is unmatched.



Performance was measured using I3en.24xlarge EC2 instances in AWS

