

Leveraging the Amazon Cloud to Dramatically Improve Application Performance and Scale

5 REASONS

To deploy WekaIO Matrix™ Hardware Independent Storage platform in the Amazon Cloud

Cloud technology has had a profound impact on how organizations build and scale IT infrastructure. CIOs historically have been forced to forecast their infrastructure needs in advance, resulting in purchasing for peak needs and over-provisioning expensive resources.

Amazon's AWS platform enables IT agility through on-demand compute and storage. The WekaIO Matrix software-only storage solution leverages the AWS platform to deliver industry leading file performance at sub-millisecond latencies. Running Matrix in Amazon allows businesses to realize the promise of elastic computing at massive scale.

1 Elastic scaling with consistent performance for compute intensive workloads

WekaIO Matrix shared accelerated storage platform is ideal for running demanding enterprise and HPC workloads in the cloud. The underlying file system, MatrixFS, transforms a collection of SSD-based EC2 instances into a single namespace file system that is fully POSIX compliant. Performance scales linearly with the number of instances and can reach 10s of millions of IOPS or TB/sec of bandwidth at latencies as low as 200 microseconds.

2 Meet changing application needs by dynamically optimizing storage

With Matrix, performance and capacity scale independently and dynamically. By optimizing Matrix for flash, the storage solution is ideal for mixed use workloads that consist of large and small files with random and sequential access patterns. Performance can be scaled up or down based on application type or resource requirements.

3 Reduce risk with advanced data protection

WekaIO MatrixFS uses a patented data protection scheme to ensure the highest levels of availability, performance, and data resiliency. The ability to span multiple availability zones (AZs) provides true disaster resiliency and ensures that data remains accessible regardless of its location.

4 Increase IT agility with on-demand resources

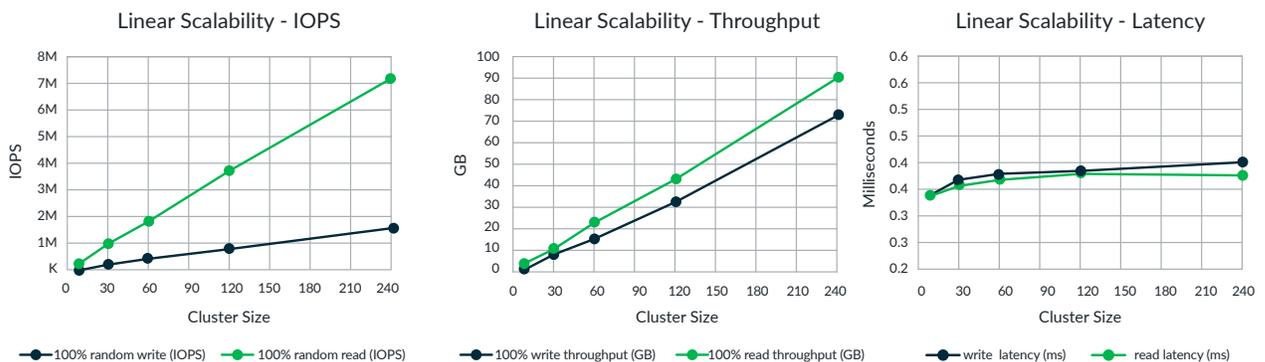
Running Matrix in the cloud eliminates the need to buy infrastructure based on peak demand periods. Spin up a compute cluster when you need it, run your jobs, and when you're not using the cluster, turn it off. All data remains accessible and protected in the cloud.

5 High Performance Computing performance with appliance-like simplicity

Setting up a high performance storage system with Matrix takes only a few clicks. There are no complicated parameters to tune, and integrated tiering allows you to seamlessly migrate cold data in the background to more cost effective S3 storage for long term retention.

FILE SYSTEM SCALES LINEARLY WITH CLUSTER SIZE

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



Test Environment - 8 R3.8xlarge cluster, 1 AZ, utilizing 2 cores, 2 local SSD drives & 10GB of RAM on each instance