EFS Storage

Amazon EFS is a simple, server less, set-and-forget, elastic file system that makes it easy to set up, scale, and cost-optimize file storage in the AWS Cloud.

With a few clicks in the AWS Management Console, you can create file systems that are accessible to Amazon EC2 instances, Amazon container services (Amazon Elastic Container Service (ECS), Amazon Elastic Kubernetes Service (EKS) and AWS Fargate), and AWS Lambda function.

Amazon EFS file systems can automatically scale from gigabytes to petabytes of data without needing to provision storage.

Tens, hundreds, or even thousands of compute instances can access an Amazon EFS file system at the same time, and Amazon EFS provides consistent performance to each compute instance.

Amazon EFS is designed to be highly durable and highly available. With Amazon EFS, there are no minimum fee or setup costs, and you pay only for what you use.

Use cases Amazon EFS support

Amazon EFS is designed to provide performance for a broad spectrum of workloads and applications, including Big Data and analytics, media processing workflows, content management, web serving, and home directories.

Amazon EFS Standard storage classes are ideal for workloads that require the highest levels of durability and availability.

Amazon EFS One Zone storage classes are ideal for workloads such as development, build, and staging environments, as well as applications such as analytics, simulation and media transcoding, and for backups or replicas of on-premises data which do not require multi-AZ resilience.

Storage classes

Amazon EFS offers you the choice of creating file systems using Standard or One Zone storage classes. Standard storage classes store data with and across multiple availability zones (AZ). One Zone storage classes store data redundantly within a single AZ, at a 47% lower price compared to file systems using Standard storage classes, for workloads that don’t require multi-AZ resilience.

Amazon EFS offers four storage classes: two Standard storage classes, Amazon EFS Standard and Amazon EFS Standard-Infrequent Access (EFS Standard-IA), and two One Zone storage classes, Amazon EFS One Zone, and Amazon EFS One Zone-Infrequent Access (EFS One Zone-IA).

Amazon EFS vs. Amazon S3 vs. Amazon EBS

Amazon EFS is a file storage service for use with Amazon compute (EC2, containers, server less) and on-premises servers. Amazon EFS provides a file system interface, file system access semantics (such as strong consistency and file locking), and concurrently-accessible storage for up to thousands of Amazon EC2 instances.

Amazon EBS is a block level storage service for use with Amazon EC2. Amazon EBS can deliver performance for workloads that require the lowest-latency access to data from a single EC2 instance.

Amazon S3 is an object storage service. Amazon S3 makes data available through an Internet API that can be accessed anywhere.