Amazon Elastic File System (EFS) | Cloud File Storage - AWS

Amazon **Elastic File System** (Amazon **EFS**) provides a simple, serverless, set-and-forget, **elastic file system** that lets you share **file** data without provisioning or managing storage. ... Standard storage classes store data within and across multiple availability zones (AZ).

Benefits

POSIX-compliant shared file storage

Amazon EFS provides secure access for thousands of connections for Amazon EC2 instances and on-premises servers, as well as AWS compute services, including ECS, EKS, AWS Fargate, and AWS Lambda, simultaneously using a traditional file permissions model, file locking capabilities, and hierarchical directory structure via the NFSv4 protocol. Amazon EC2 instances can access your file system across AZs, regions, and VPCs, while on-premises servers can access using AWS Direct Connect or AWS VPN.

Fully managed

Amazon EFS is a fully managed service providing shared file system storage for Linux workloads. It provides a simple interface allowing you to create and configure file systems quickly and manages the file storage infrastructure for you, removing the complexity of deploying, patching, and maintaining the underpinnings of a file system.

Scalable performance

Amazon EFS is designed to provide the throughput, IOPS, and low latency needed for Linux workloads. Throughput and IOPS scale as a file system grows and can burst to higher throughput levels for short periods of time to support the unpredictable performance needs of file workloads. For the most demanding workloads, Amazon EFS can support performance over 10 GB/sec and more than 500,000 IOPS.

Cost-effective

With Amazon EFS storage, you pay only for what you use. There is no need to provision storage in advance and there are no minimum commitments or up-front fees. With EFS Lifecycle Management, you can automatically move files accessed less frequently to a cost-optimized storage class, reducing file storage costs by up to 92%. With Amazon EFS One Zone storage classes, customers with workloads that do not require the multi-AZ resilience of Standard storage classes can choose additional savings of 47% by storing their data in a single-AZ. You can also use AWS Budgets to monitor your file system costs

Dynamic elasticity

Amazon EFS automatically and instantly scales your file system storage capacity up or down as you add or remove files without disrupting your applications, dynamically providing the storage capacity you need as you need it. You simply create your file system and start adding files with no need to provision storage in advance.

Security and compliance

Amazon EFS allows you to securely access your files using your existing security infrastructure. Control access to your Amazon EFS file systems with POSIX permissions, Amazon VPC, and AWS IAM. Secure your data by encrypting your data at rest and in transit. Amazon EFS also meets many eligibility and compliance requirements to help you meet your regulatory needs. Click here for a list of compliance programs in scope for Amazon EFS.