PAWS Storage Services

Amazon Web Services (AWS) provides low-cost data storage with high durability and high availability. Data is durable and sticks around after reboots, restarts, or power cycles.

Now we're discussing about three major types of AWS Storage Services.

1 Simple Storage Service(S3) / Object Storage

- This type is simply a place to store and retrieve files, photos, videos, and other documents from anywhere websites and mobile apps.
- Each object is stored as a file with an ID number and its metadata also included. Applications will use this ID number to access these objects.
- <u>#s3</u> supports a variety of compliance and security standards. It supports three types of encryption and also support Multi-Factor Authentication (MFA).
- *Puse cases* Web applications , Backup and Storage , Disaster Recovery , Big data.

2 Elastic Block Store (EBS) / Block Storage

- EBS allows you to store files directly on an EC2 instance, allowing the instance to access your files in a quick and cheap manner.
- We can use <u>#ebs</u> volumes by mounting them into an EC2 instance then formatting the volume with the applicable file system.
- EBS allows to expand the capacity dynamically and even to change volume type without any downtime or performance impact.
- Use cases Data warehousing and ETL, Low-latency interactive apps, Log processing.

3 Elastic File System (EFS) / File Storage

- #EFS allows to share file data from multiple EC2's or on-premise instances simultaneously.
- Data is stored by <u>#efs</u> as objects, and each object spread across several region's availability zones. It is long lasting than S3.
- AWS allows connectivity between #ec2 instances and EFS file systems. We can associate one security group with EFS and another with EC2 instance. These security group will act as firewalls and enforce rules that define the traffic flow between EC2 instances and EFS file systems.
- Use cases Developer tools, DB backups, Container Storage.