S3

Amazon Simple Storage Service (also called Amazon S3) is a scalable, high-speed, web-based cloud storage service designed to store and retrieve any amount of data at any time. It uses an object storage architecture, where data is managed as objects rather than file hierarchies. The industry standard object storage service, S3 streamlines the process of storing files on the cloud, while providing easy methods of accessing and managing it.

Each object in S3 is stored in a bucket and consists of data, metadata, and a unique identifier. S3's key features include high (99.999999%) durability, availability, security, and performance. It's widely used for backup and recovery, content distribution, static website hosting, etc, making it a fundamental service for many cloud-based applications.

S3 has different storage classes or categories to choose from based on the performance, availability called S3 Standard, S3 Infrequent Access, S3 Intelligent Tiering, etc each optimized for different use cases based on access frequency and cost requirements. These will be discussed in future sections.

It is also the **cheapest** of the three major forms of storage in AWS, the others being: Block Storage using EBS (Elastic Block Store), which is used in databases and File Storage using EFS. Both types of cloud storage have already been discussed in the background, though their representative services will be discussed in later sections. Usually, when talking about the cost per Gigabyte(GB) for the three major storage services in AWS, they can be organized as follows:

EBS ⇒ Cheap **EFS** ⇒ Cheaper **S3** ⇒ Cheapest