

① Storage as a service (S3): It is a cloud based model that allows businesses and individuals to rent storage space from a third-party provider. This model offers flexibility, scalability and cost efficiency, making it an attractive option for organisations of all sizes. or It is a cloud business model in which a company rents its storage area infrastructure to another company or individuals to store the data. The storage provider provides the client with the software required to access their stored data.

- STaaS eliminates the need for users to purchase and maintain their own storage infrastructure. It's providers offer a range of storage options based on the amount of data, type of data, and level of security required. The storage can be provided in the form of file, block, or object storage, depending on the need.

Key Features of STaaS are :

- 1) Scalability: It's providers offer elastic storage solutions that can grow with our needs. Whether we need to increase capacity temporarily or permanently, it allows you to scale up or down as required.

- 2) Security: Telling its providers implement robust security measures, including encryption, access controls, and regular security audits, to ensure data is protected from unauthorized access and breaches.
- 3) In conclusion it is revolutionizing how the businesses manage their data storage needs. By offering scalable, secure, and cost effective storage solutions, it enables organizations to adapt to changing data requirements without the burden of managing physical infrastructure.

② Amazon S3 use cases:

- a) Data Backup and Recovery: It provides a highly durable storage infrastructure designed for mission-critical and primary data storage. Organizations use Amazon S3 to store and to protect any data and to for backup, providing redundancy and data integrity with easy retrieval options.
- 4) Big Data Analytics: S3 is a key component in big data ecosystems. Businesses use S3 to store massive amounts of raw data and then process and analyze it using other AWS services like EMR, Amazon Athena etc.

- c) Data Archiving : S3, especially with its glacier and glacier Deep Archive storage classes, is well suited for long term data archiving. Businesses use S3 to store infrequently accessed data, regulatory archives, and compliance records cost effectively.
- d) Internet of Things (IoT) : IoT devices generate vast amount of data that need to be stored reliably and analyzed. S3 provides a scalable storage solution for this data, allowing for real time analysis and processing using AWS IoT and other services.
- e) Application Hosting : Developers use S3 to host assets for web and mobile applications. S3's integration with AWS CloudFront CDN enhances application performance by delivering content to users with low latency.

③ Steps for S3 : Following are the steps for S3 :

- Step 1) Log on to your AWS console. If you don't have an account, create it.
- Step 2) In the search bar at the top of the AWS management console, type "Amazon S3".

Step 3: Click on "S3 - Scalable storage in the cloud" and proceed further

Step 4: Click on "Create Bucket". A new pane will open up, where you have to enter the details and configure our bucket.

(Now in the general configuration)

Step 5: Enter the name of your bucket. Do consider to follow the naming rules.

Step 6: Now choose an AWS region nearest to your location or where you want your data to reside.

1) In the object ownership category, leave it as recommended.

2) In Block Public Access, settings for this bucket category, ensure that BLOCK ALL PUBLIC ACCESS has been checked. (can be changed later)

3) In the Bucket Versioning category, choose Disabled. Leave other advance settings as default

Step 7: Click on Create Bucket. and viola! your bucket is created.