

# STORAGE





**MIN: 15 GB (FREE)**

**MAX: 30 TB (NOT FREE)**

# WHAT IF I WANT TO STORE PETA BYTES OF DATA



**Videos**

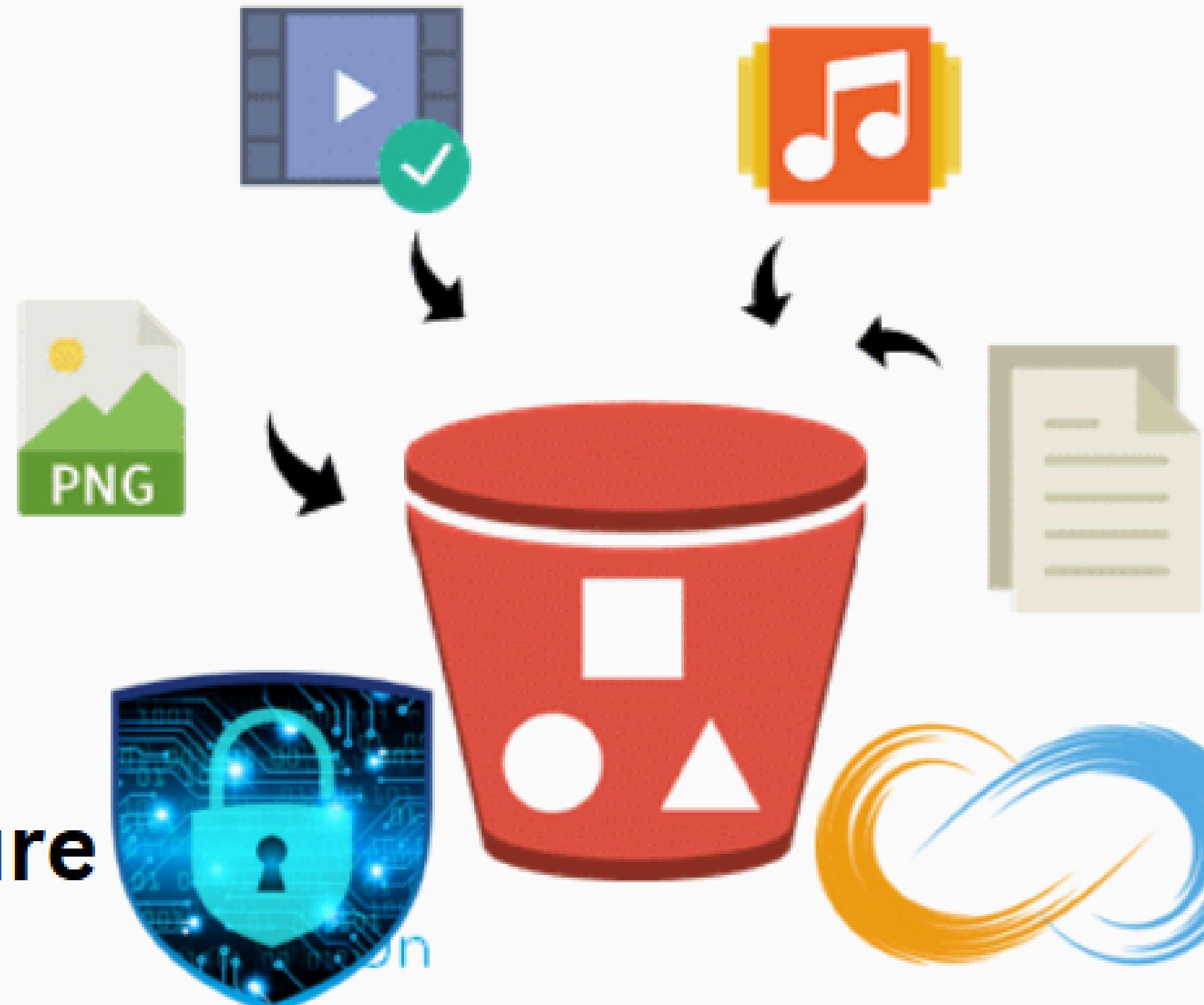
**Audios**

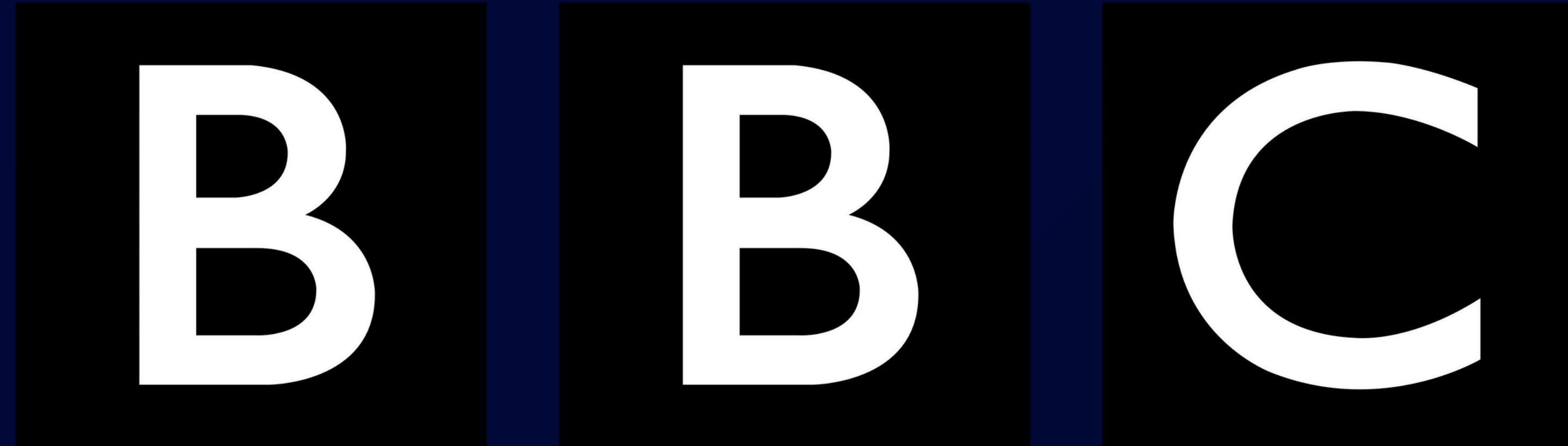
**Images**

**Files**

**Highly Secure**

**Infinite storage**





BBC Preserves 100 Years of History Using Amazon S3



By using S3 the bank is saving \$380,500/Year

INR: 3,19,48,682

# WHAT IS S3 ?

- Amazon S3 is a Simple Storage Service
- stores objects like files, Photos, Audio, Videos
- providing more scalability and security to.
- It allows the users to store and retrieve .
- Many companies use s3 to store customers data.
- it has infinite scaling capacity.

# ADVANTAGES

- To store all types of Data
- Static web hosting
- Big Data Analytics
- Backup and Recovery
- Highly scalable & Flexible
- Low Cost

# WHAT ABOU REAL LIFE USECASES





NETFLIX

Netflix stores original master files, transcoded video streams, thumbnails, subtitles, and metadata in S3. It stores multiple quality versions (480p, 720p, 1080p, 4K) are generated and stored in S3 buckets.



INSTAGRAM

Every photo, story, and video uploaded by users would be stored in S3 buckets

Each media file (e.g., a story or reel) has metadata stored in a database (like DynamoDB or RDS), but the actual video or image file sits in S3.



**SWIGGY**

SWIGGY

Every dish or restaurant listed has images — all of which are stored in S3.

Customer invoices and tax receipts are generated permanently in S3.

Delivery partner uploads documents like Aadhaar, PAN, license, or selfie photos



Snaps, videos, stories, and memories are uploaded by users and stored in S3

Snapchat is famous for temporary content (e.g., 10-second Snaps or 24-hour Stories).

These are stored in S3 with object expiration rules or TTL (time to live) using S3 Lifecycle Policies or Lambda functions.

# HISTORY OF S3



- Launched: March 14, 2006
- First AWS service ever released publicly
- Marked the beginning of AWS (Amazon Web Services) and modern cloud computing

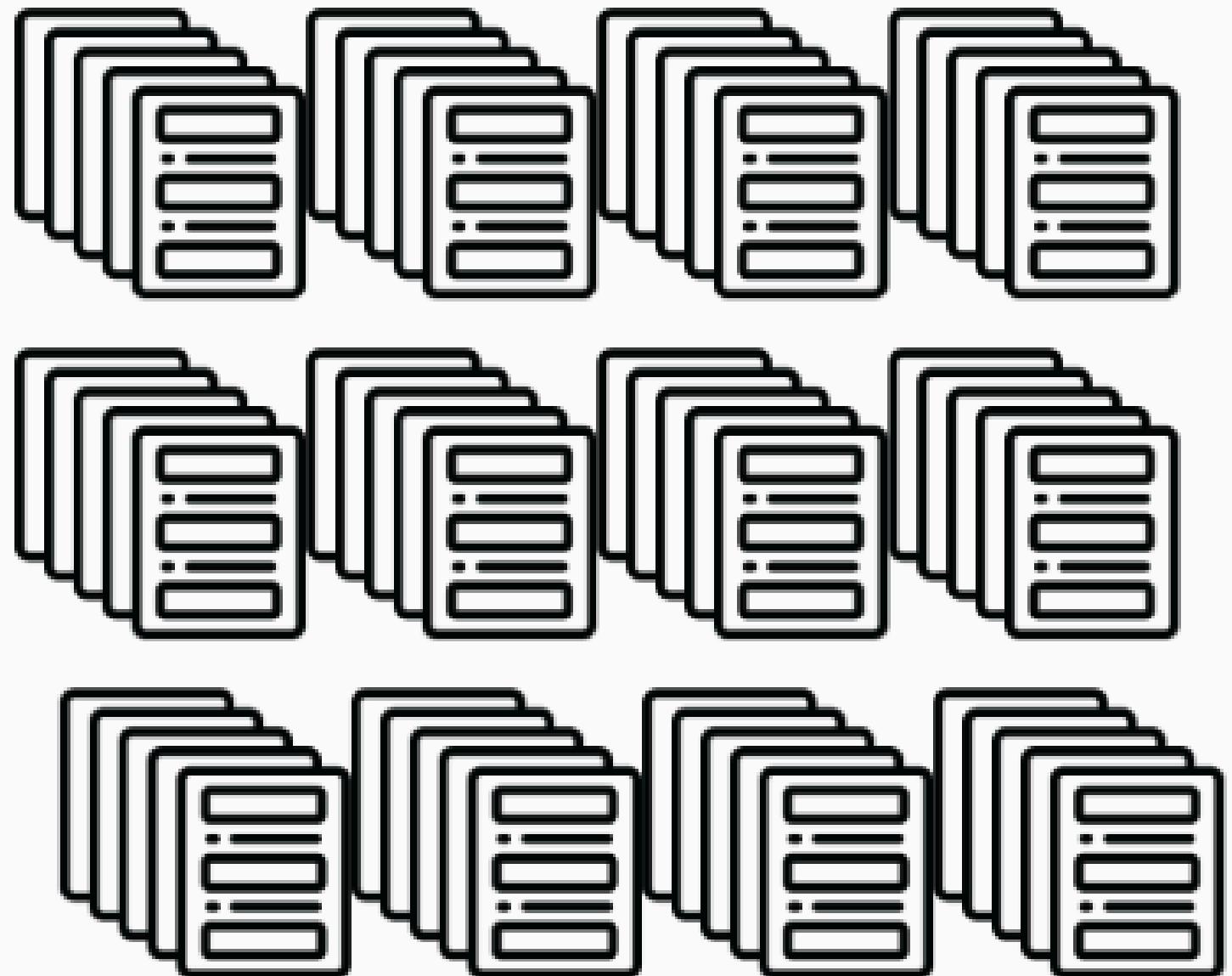
# HISTORY OF S3



- Back in the early 2000s, Amazon (the e-commerce giant) faced massive scalability issues:
  - Millions of products
  - Billions of page views
  - Storage systems crashing under traffic

# How about Data Duration

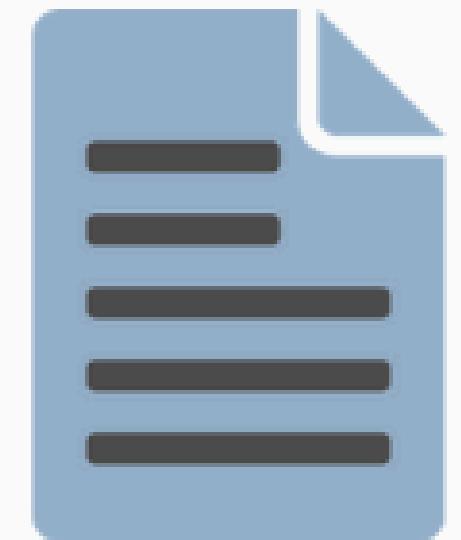
**10 million**



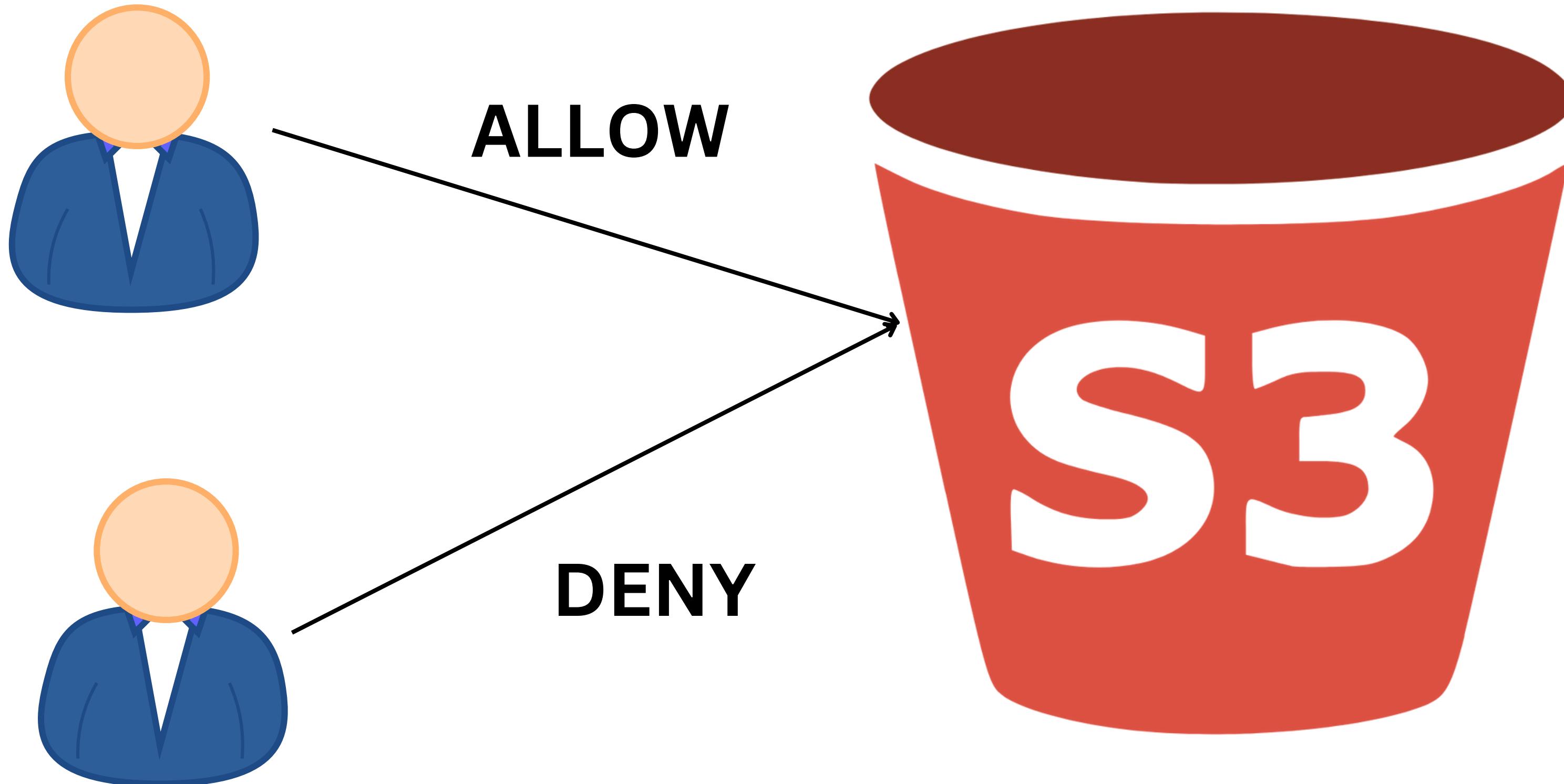
**10000**

**YEARS**

**1**



# How about Security



# ATTRIBUTES

- Key
- Version ID
- Value
- Metadata
- Access control information
- Tags

## HOW MUCH IS FREE

- There is a limit of 100 buckets per AWS account(exp)
- But it can be increased if requested by AWS support.
- The maximum size of an AWS S3 bucket is 5 GB.

# WAYS TO UPLOAD FILES

- **GUI**
- **CLI**
- **API**
- **SDK**

# RULES

- 3 (min) and 63 (max) characters long.
- can consist only of lowercase letters, numbers, dots (.), and hyphens (-).
- must begin and end with a letter or number.
- Bucket names must not contain two adjacent periods.
- Bucket names must not be formatted as an IP address (for example, 192.168.5.4).

# WHAT IF USER DELETE A FILE BY CHANCE



**ORIGINAL FILE**

**COPY FILE**



# VERSIONING

- Versioning means Copy of a Object.
- If You delete a file we can retrieve using Versioning.
- By default it will be disabled.
- Each file will have Different Version Id.
- You can always restore the previous version.

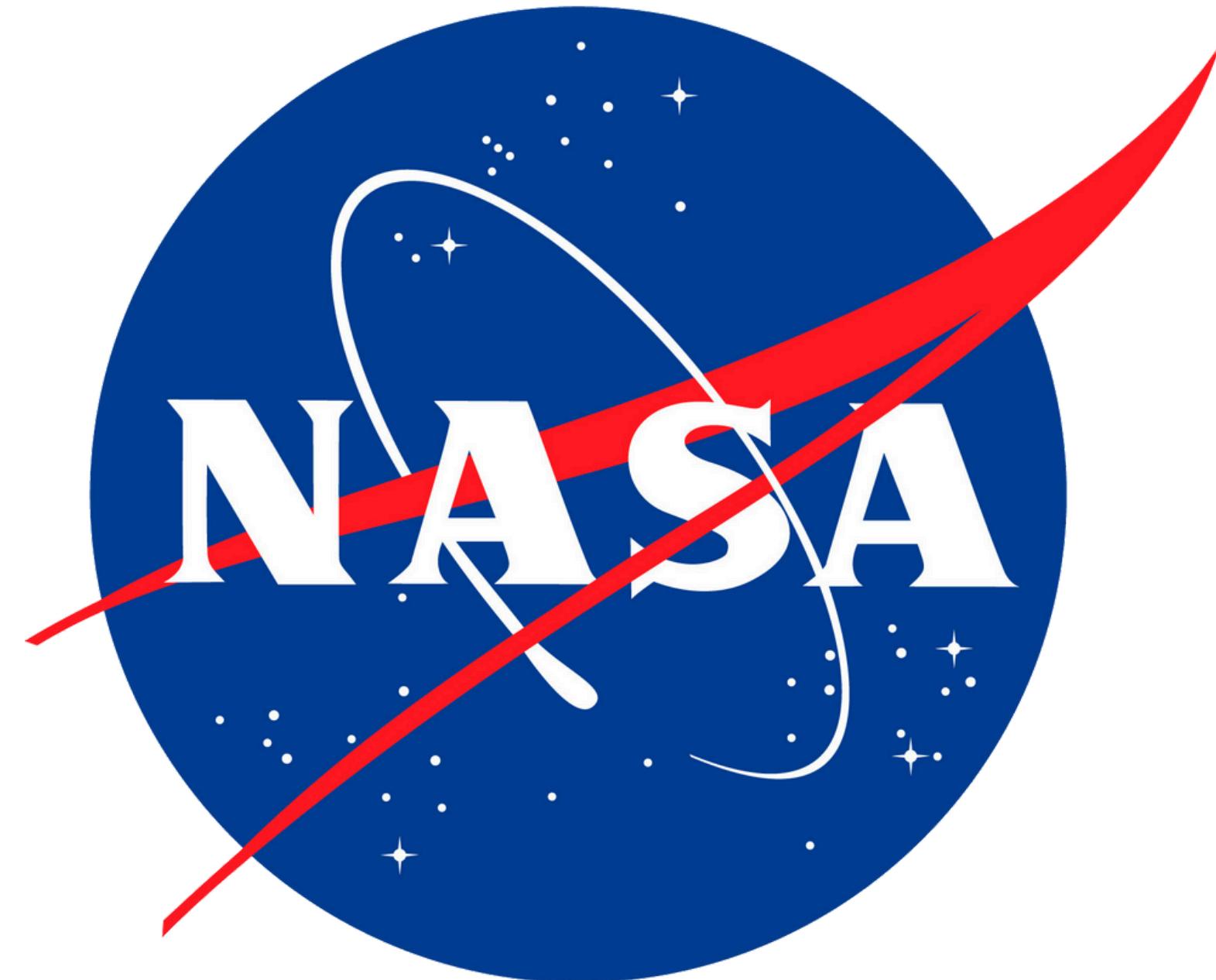
# VERSIONING



- Netflix uses Amazon S3 to store a massive amount of video content, metadata, and user information.
- Netflix users can stream content anytime, anywhere.



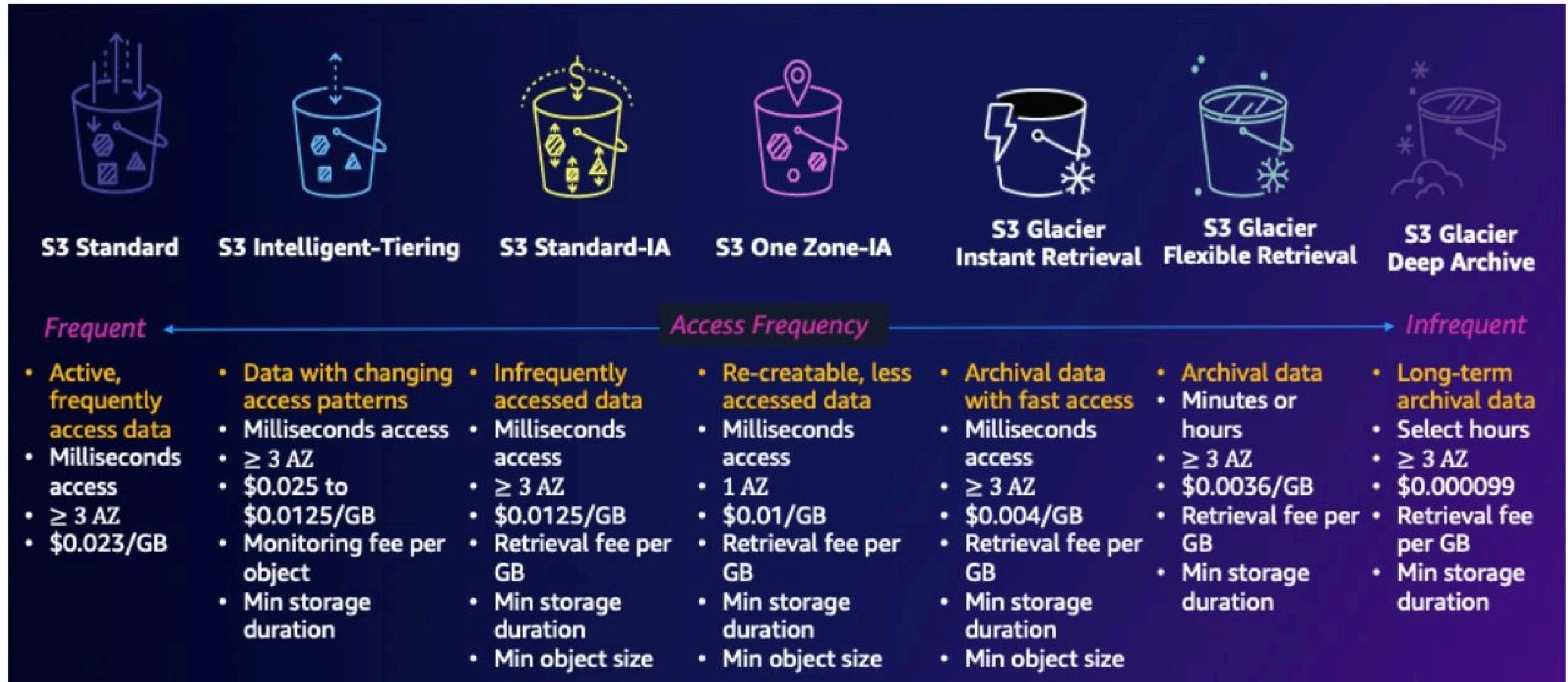
- Spotify store all its music files and user data in S3.
- Spotify store petabytes of data efficiently in S3.

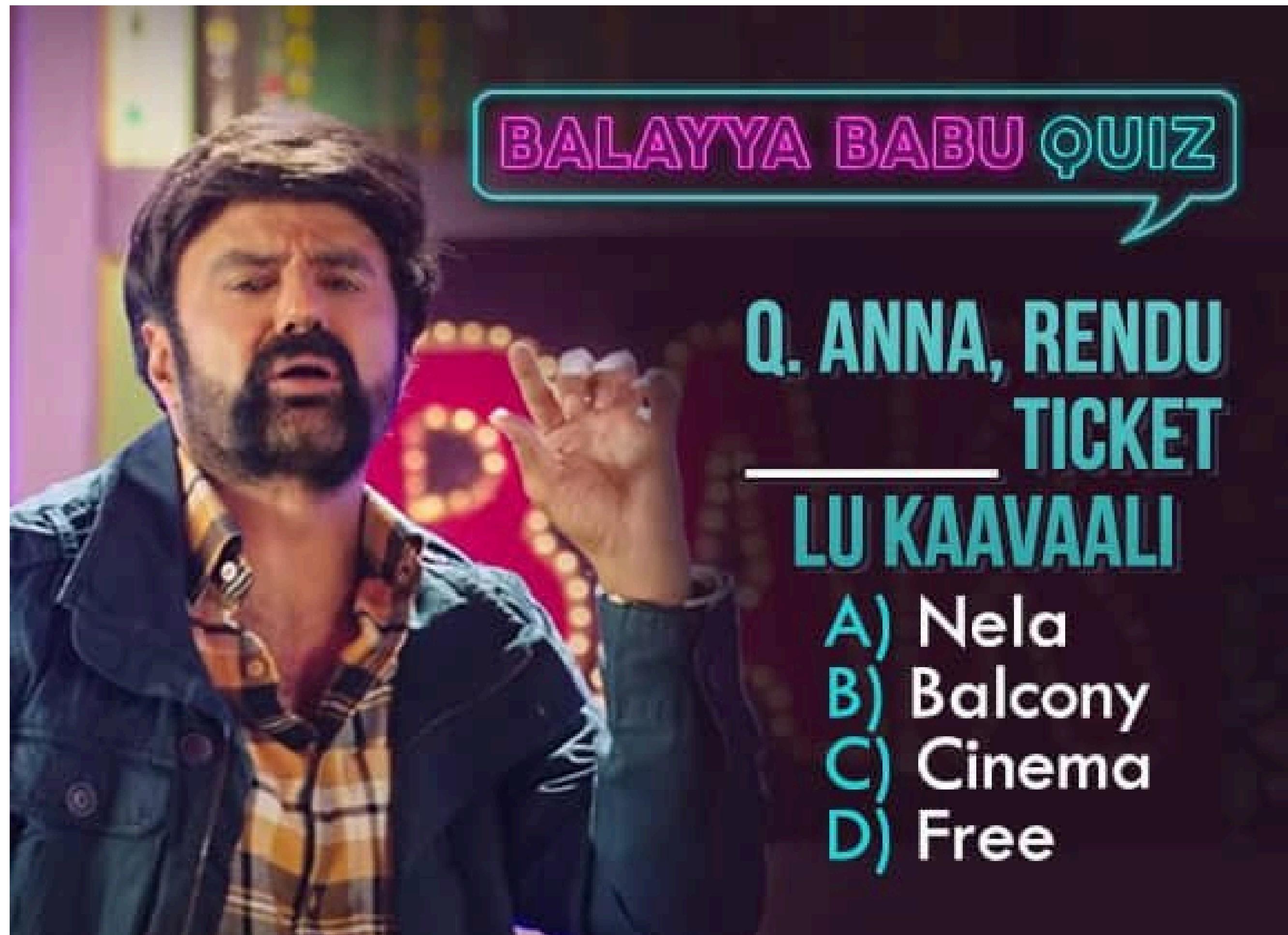


- NASA managing & storing datasets from space missions.
- Ensures that sensitive data is protected through encryption and access control.

# SAMSUNG

- Samsung uses S3 for backup storage solutions and handling large datasets in real-time.
- With versioning, S3 can keep multiple copies of data, reducing the risk of data loss.





**BALAYYA BABU QUIZ**

**Q. ANNA, RENDU  
TICKET**

---

**LU KAAVAALI**

**A) Nela**  
**B) Balcony**  
**C) Cinema**  
**D) Free**

↓ LOWER BALCONY ₹100 ↓

G H I WAY J K L M N WAY O P Q R S WAY T U V W X Y

Screen This Way

↓ THIRD CLASS ₹40 ↓

A B C D E F G H