



AWS S3 Notes

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Q: What is S3

A: Enterprise cloud storage service & S3 is a proprietary product of AWS. S3 is a major service of AWS. You can store unlimited data in S3

In AWS three types of storage: 1. EBS (Block Storage), 2.S3(Object Storage), EFS (File storage), 4.FSx (Extra storage for windows)

EFS (File storage): EFS is storage for Linux File storage & we can connect into multiple ec2 instances at a time & across availability zone.

Buckets: S3 the storage that I have is in the buckets. The soft limit of Buckets is 100 & you can increase it.

Why Buckets: Because data is treated as a liquid, Liquid will remain in the bucket

5TB: That 5TB is the limit of the size of one object.

Bucket Name: Name must be unique in global, Name limit should be 3 then 36, My S3 consol is global but the bucket is regional.

Q: Which type of data is not suitable for S3

A: There is no limit on what kind of data you can store. You keep compliance data on S3 & we can also audit S3.

Q: Where can I get the data on S3?

A: Your data is in GIBs you can just upload simply from the CLI, If your data is in TBs you can use Direct Connect, Kinesis, Data pipeline, Data Sync,

Kinesis: For real-time Data, Streaming Data

Data Sync: Data sync is the fastest option to send Data on-premises to S3 using lease line. He is direct connects your premises to S3.

Hybrid Cloud: When you are using op-premises along with some cloud providers. Storage Gateway.

Multi-Cloud: When you are using more than two clouds.

If we are migrating data to on-premises to S3 then we have three options: Snowball, Snowball Edge, Snowmobile,

Snowball: Snowball is a device you can request from AWS. For TBs, PBs Data.

Snowball Edge: The extra functionality is that you compute power in that particular box.

Snowmobile: it is a track, In one track we can store 100PB, Use: To transfer Hexa byte data.

Q: Difference Between Data Warehouse & S3?

A: S3: S3 can store various types of data, like archival Data, Hot Data. let's say you have some data on S3, You want to perform some sort of analytics on that you can do it, You can do it using Athena.

Warehouse: In the warehouse, there is only warehousing data on which we have to perform analytics. Any kind of analytics job you want to perform you can do that.

Redshift Spectrum: performing analytics on redshift data.

SSL to TLS encryption is in-flight.

In S3 we are an option to encrypt any object tath we upload at rest.

KMS: KMS is another AWS service for you can create keys for encryption & decryption.

There is no such thing as called folder in S3, There is Prefix.

Object: it is something related to key & Value.

Cloud Trail: Track API level calls in AWS.

Multi-Part Upload API: if your object is above 5GB you have to use it multi-part upload API otherwise you won't able to upload it. It's like a must thing. Recommended your object size more than 100MB use multi-part.

CloudFront is an AWS Cdn(Content delivery network).

ARN: Amazon Resource Name.

JSON is key-value pair.

Static Website: Not change the UI on the basis of the user, It is the same for all users.

Dynamic Website: You have to give the experience of the user on the basis of that user means content/UI change on the basis of the user.

Availability of Data: 4/9 SLA

Q: How soon can we access the data?

A: We can access data from instantaneously access the data in every class other than Glacier & Glacier Deep Archive.

Glacier: Cold Data, Historical Data, OLAP Data

Three of retrieval from a glacier: expedited (1 to 5 minutes), standard retrieval(3 to 5 hours), Bulk retrieval (5 to 12 hours).

In Glacier Deep Archive we can only retrieve standard retrieval(3 to 5 hours) or Bulk retrieval (5 to 12 hours).

Whatever is there in Glaciar and Glacier Deep Archive you have to first restore it. Once you restore it then you can open it.

Consistency Model: For put, Read after write, Now is Strong Read after write

Eventual Consistency: For delete

Presign url: `aws s3 presign s3://foldername/filename --expires-in 120 --region us-east-1`

MFA delete

