**S3 BUCKET AGENDA**

**.Versioning**

**.Statick website hosting**

**.Classes/tiers**

**.Cross region replication**

**.Transfer Accelaration**

**.Encryption**

**.Tags**

**.Metadata**

**.Acl**

**.Bucket policies**

**.Life cycle management**

**++++++++++++++++++++++++++++++++++++++++++**

**Storge --------------> S3**

**Lets delete the existing bucket**

* **Create a new bucket**

**Bucket name ---- > version --- > vardhan917758**

**Region -mumbai**

**Next ----Next ---- ---- > un check Block all public access**

**Next --- create Bucket**

**How to enable versioning**

**+++++++++++++++++++++++++**

**Click on the bucket ---------- > properties tab**

**(observation : By default version is disable)**

**EDIT ------- > Enable**

**Save changes**

**Lets upload on the object**

**++++++++++++++++++++++++++++++++++++++**

**Creat sample.txt ,content of the file let it be “my first line”**

**Upload the file ------>Next----- > grant public access ---->Next--->next**

**First Advantage of versioning**

**++++++++++++++++++++++++++++++++++++++++++++++++**

**We can recover deleted object**

**Lets delete the object .**

**Select the check box --- > Action ----- > delete**

**How can we recover**

**++++++++++++++++++++++++++++++++++**

**Enable list version**

**We can see the object and delete marker.**

**Note : when we delete ,object is not delete.**

**It is marked as deleted.**

**So ,if you remove the delete marker ,we will get object .**

**Select the delete marker check box ------ > Actions ---- > Delete ---->**

**Now disable list version**

**Our object is back !!!**

**2nd Advantage we can maintain different versions of the file.**

**Open the same file in the desktop**

**Add another line “this is second line”**

**Upload the same file again .**

**Get the object URL, and check from the browser.we get the latest file.**

**Where can we see the older version of file.?**

**Show the list version**

**We can see the both versions**

**And we can download the older version of the file .**

**Even if you delete the file , we can recover the both versions.**

**Select the object ---- > action ---> delete ---- > delete**

**Select the show button .**

**We can see the both versions of the file .**

**If you delete individual versions , we cannot recover.**

**Note : if you delete the bucket ,we cannot recover.**

**Lets delete the bucket.**

**Now, the dash board is empty.**

**++++++++++++++++++++++++++++++++++++++++++++++++++++++++**

**Static website hosting**

**Lets create a bukcket**

**Bucket name --- bucket456478**

**Next ------ Next ----- > uncheck block all public access -- ---- Next -- > create a bucket**

**Select the bucket ----- >properties --- >static website hosting**

**---- > Edit --- > Enable ---- > Host a static website ----**

**Index document --- index.html**

**Error document ------- error.html**

**Save**

**Now ,we need to create index.html and error.html**

**In this index.html file**

**<h1>welcome to my site </h1>**

**And the error.html file**

**<h1>site under construction </h1>**

**then two servers are upload in created bucket ----- > (bucket456478)**

**Note : make it public.(permission ---ACL –(every one) public access)**

**Now ,go to the properties of the bucket --- > static website hosting --- > get URL of the website (end point)**

**Note : individual file should have public Access.**

**what is the use of error.html?**

**incase of any reason, if index.html is not accessible**

**then error page will be displayed.**

**Lets make the index.html page as private.**

**Select index.html --- > ACL ------ > Edit ---- > public Access --- > --read --- > uncheck --- > save changes**

**Now, refresh the URL ,we get error.html page !!!!**

**Lets , delete the files ---- and delete the bucket .**

**CRR (cross region replication)**

**Lets say two buckets (1st bucket in Mumbai 2nd bucket in sydney region )**

**We upload the object in Mumbai, the object should also be available in sydney.**

**As we are replicating the object in another region, it is called cross region replication .**

**Vice-versa will not happend.**

**If we delete the object in Mumbai, it will not deleted in sydney .**

**If we edit the object in Mumbai, it will not edited in sydney .**

**Lets create bucket**

**Bucket name --- Mumbai-sfddhhdh**

**Region – Mumbai**

**Next --- > Next --- > uncheck block all public access**

**Next ---- > create bucket .**

**Lets create 2nd bucket**

**Bucket name --- sydny-sfddhhdh**

**Region – sydney**

**Next --- > Next --- > uncheck block all public access**

**Next ---- > create bucket .**

**Enable cross region replication in Mumbai.**

**Select Mumbai bucket --- > management -- > replication rules --- > create a replication rules --- > Enable bucket versioning ---- > replication rule name --- > CRR1**

**Destination bucket --- > Sydney bucket -- > Enable versioning -- > IAM role--- >**

**(to establish connection between two region, we need role )**

**IAM ROLE -- create a new role**

**Save .**

**Lets upload object in Mumbai bucket ,it will be replicated in sydney bucket .**

**Transfer Acceleration**

**When we Enable transfer Acceleration ,data will be transferred to the Edge location and then from Edge location data will be transferred to the bucket.**

**Select the Mumbai bucket --- > properties --- > Transfer acceleration --- > EDIT --- > Enable -- > save changes.**

**HOW CAN WE CHECK THE SPEED**

**Properties ---- transfer acceleration ---- > Learn more**

**Amazon s3 transfer acceleration speed comparision tool**

**++++++++++++++++++++++++++++++++++++++++++++++++++**

**Encryption**

**There are two types of encryption**

1. **AES -256 (Advance encryption standerd) single encryption.**
2. **AWS –KMS (key management service ) – double encryption (more secured)**

**Select the required encryption**

**Select the bucket –properties ---default encryption—edit ----enable**

**++++++++++++++++++++++++++++++++++++++++++**

**Metadata & tags**

**Metadata --- to provide the more information about the key value-pairs.**

**Key are predefinied . ex : content-type, content-launguage etc.**

**Tags : to provide more information about the object key-value pairs.**

**Key and values we need to provide.**

**We need to upload the object first .**

**Select the object --- > properties -- > we can see the metadata -- > and tags.**

**++++++++++++++++++++++++++++++++++++++++++++++++++**

**Access controle list (ACL) And Bucket policys**

**Acl : To provide permission to another aws account.**

**select the bucket ------- permission tab**

**ACL -----edit ---ADD grantee**

**Enter the canonical id ----save changes**

**Note : Access controle list is available at bucket level, as well as object level also.**

**++++++++++++++++++++++++++++++++++++++++++**

**Bucket policys**

**Bucket policys : to permissions to the bucket level only.**

**Select the bucket --- > permissions ,we can see bucket policy.**

**Bucket policy are written in jsoncode.**

**Bucket policy should be definied in json code .**

**It’s the job of AWS administrator.**

**++++++++++++++++++++++++++++++++++++++++**

**LIFE CYCLE MANAGEMENT**

**Lets create a new bucket .**

**Select the bucket --- >management tab --- > create a life cycle management rule.**

**Rule name : myrule**

**This rule is applies to all objects ---- I acknowledge**

**Taransit current version of objects between storage classes.**

**Standard-IA - 30 days**

**Add Transition**

**One zone -IA ---60 days**

**I acknowledge**

**Create a rule**

**Note : from now any object uploaded in the bucket will follow the rule for transition.**

**++++++++++++++++++++++++++++++++++++**