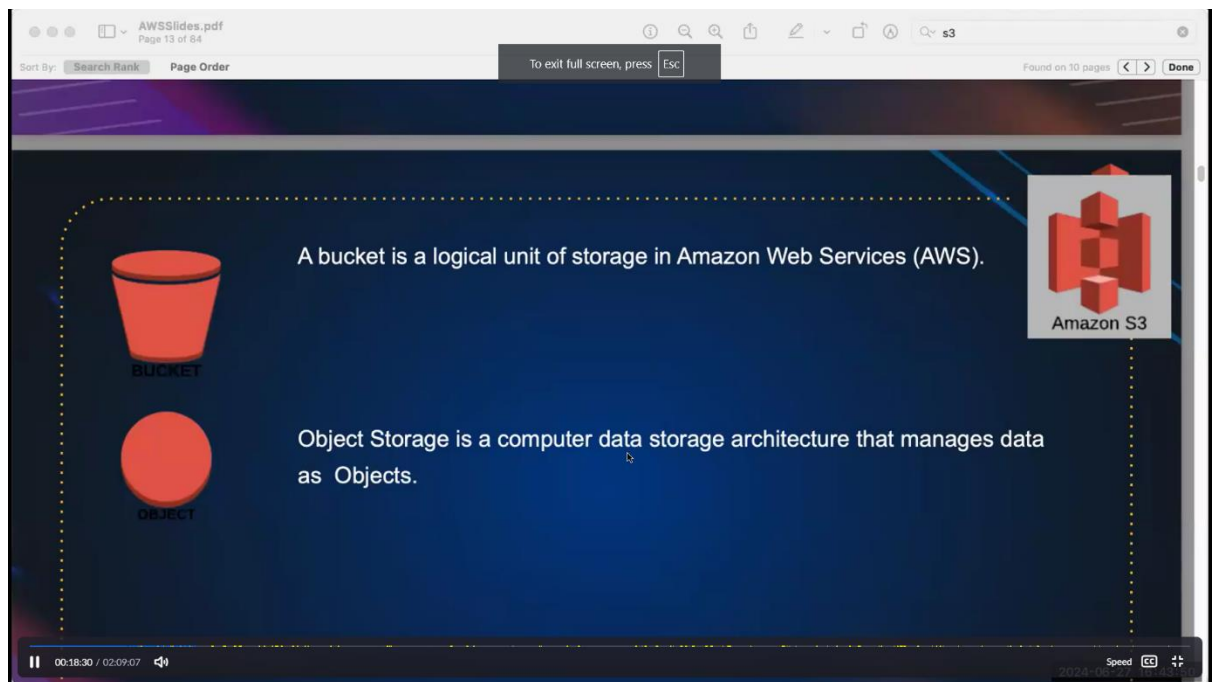
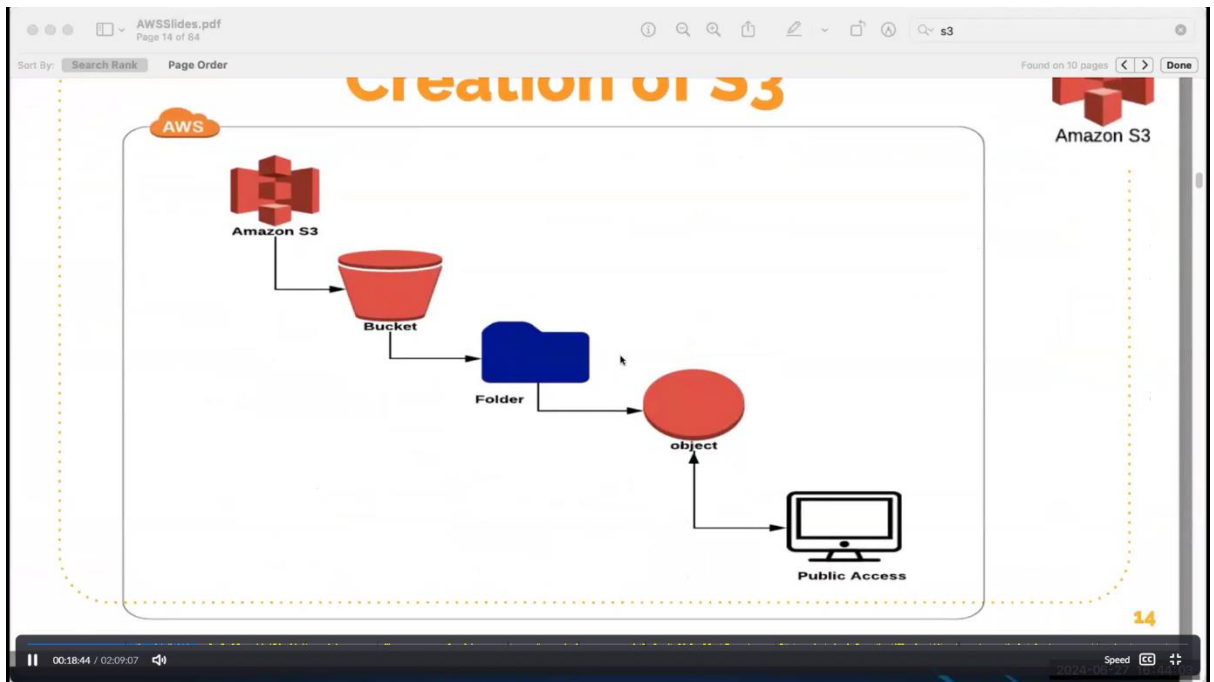


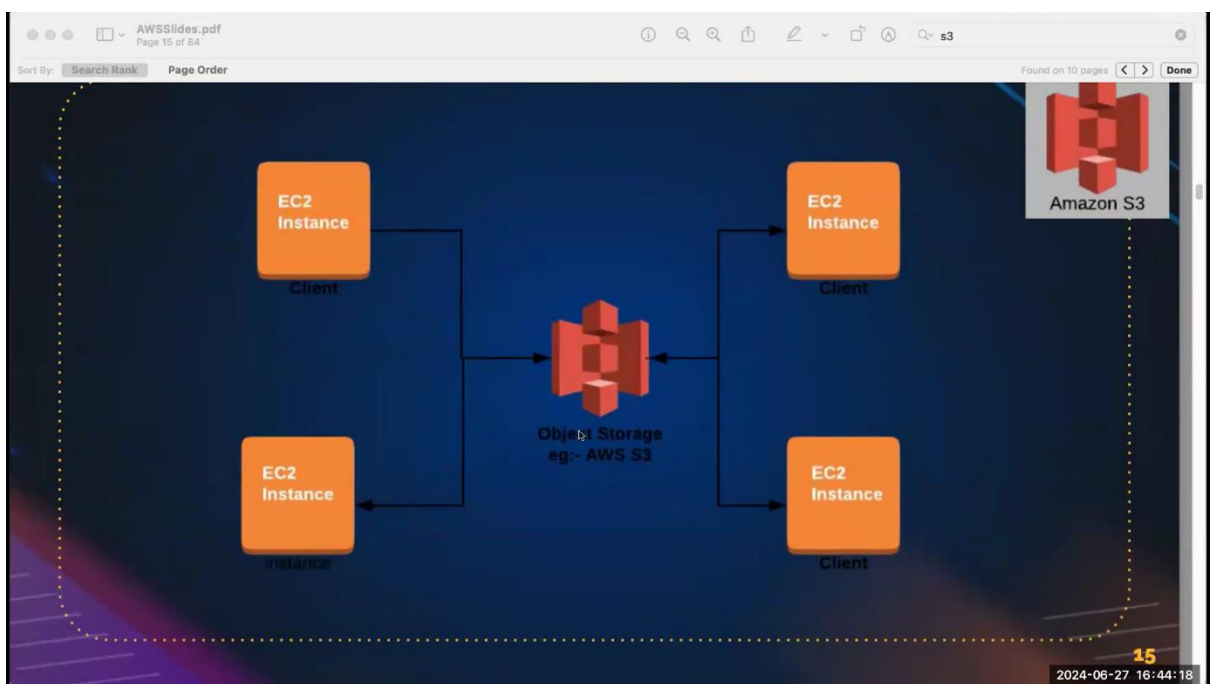
Day 2 -AWS (S3 &EFS)

- S3 comes under **storage service**
- S3 to store any kind of data. So, you can store any unstructured data or structured data. You can store your files, videos, images, anything can be stored inside your S3 bucket.
- inside s3 you will be creating **buckets**. it's a kind of a folder to organize your data.
- **you can create 100 buckets. So 100 buckets is a limitation for every account. Unlimited data can be stored inside your bucket.**
- To properly organize your data, we do it with the help of buckets.
- So, you can connect your S3 buckets through the Internet to access your data.
- **S3 storage can be accessed. The data that you put inside your S3 bucket can be accessed or retrieved through the Internet.**
- *“the data are stored in the form of objects”.so S3 called as “object based storage”.*





We can share bucket to diff ec2

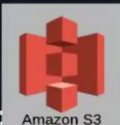


AWSSlides.pdf
Page 16 of 84

Sort By: Search Rank Page Order

Found on 10 pages

S3 Storage Classes




- 1 S3 Standard:**
general-purpose storage of frequently accessed data. Fast access & object replication in multi AZ.
- 2 S3 IA– Infrequent Access:**
Long-lived, but less frequently accessed data. Slow access, object replication in multi AZ
- 3 S3 One Zone-IA**
is for data that is accessed less frequently, but requires rapid access when needed. Slow access, no object replication
- 4 S3 Intelligent Tiering**
Automatically moves data to most cost effective tier.

00:20:31 / 02:09:07

Speed

S3 Storage Classes



- 5 S3 Glacier:**
Low Cost Storage class for data Archiving.
- 6 S3 Glacier Deep Archive**
Lowest cost storage, retrieval time of 12 Hrs.

Pricing differs for every classes.



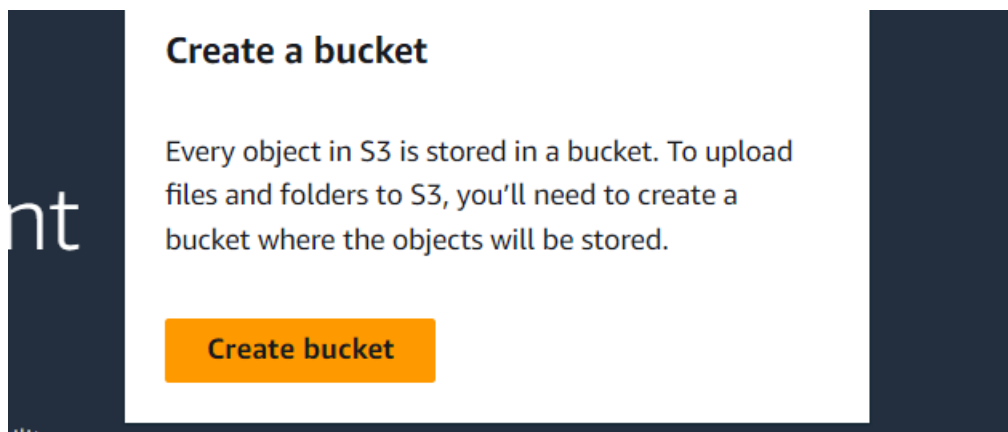
- Data can not use more than 30 days put it in S3 infrequent access.
- Data can not use more than 90 days put it in S3 amazon glacier.

<https://us-east-1.console.aws.amazon.com/s3/get-started?region=us-east-1>

how to create a bucket:

Bucket name is unique like gmail. because your bucket name comes under the global namespace

- So I'm just giving Acl enabled, which means I can access the bucket out of my aws account also. But this is not recommended.
 - Always in order to keep your data, we have to maintain the data's integrity to secure your data. We don't go with the we don't enable Acl Acl means you can share your data among multiple aws account. So if I want to access my data through the Internet.
 - you should also block all the in disable block all public access, just disable
 - if you don't want to access your data, you have to select Acl disabled
- by default. For the data security, everything will be enabled so that your data isn't shared is not going out. From your aws account
- inside bucket we can store data or run static website



General configuration

AWS Region

Asia Pacific (Mumbai) ap-south-1

Bucket name [Info](#)

awsbucket

Bucket name must be unique within the global namespace and follow the bucket naming rules. [See rules for bucket naming](#)

Copy settings from existing bucket - *optional*

Only the bucket settings in the following configuration are copied.

Choose bucket

Format: s3://bucket/prefix

Object Ownership [Info](#)

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

☐ **ACLs disabled (recommended)**

All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

☒ **ACLs enabled**

Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

Object Ownership

☒ **Bucket owner preferred**

If new objects written to this bucket specify the bucket-owner-full-control canned ACL, they are owned by the bucket owner. Otherwise, they are owned by the object writer.

☐ **Object writer**

The object writer remains the object owner.

i If you want to enforce object ownership for new objects only, your bucket policy must specify that the bucket-owner-full-control canned ACL is required for object uploads. [Learn more](#)

Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

☐ **Block all public access**

Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

☐ **Block public access to buckets and objects granted through *new* access control lists (ACLs)**


S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.

☐ **Block public access to buckets and objects granted through *any* access control lists (ACLs)**

S3 will ignore all ACLs that grant public access to buckets and objects.

☐ **Block public access to buckets and objects granted through new public bucket or access point policies**

Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#) 

Bucket Versioning

- ☒ Disable
- ☐ Enable

Tags - *optional* (0)

You can use bucket tags to track storage costs and organize buckets. [Learn more](#) 

No tags associated with this bucket.

Add tag

Default encryption [Info](#)

Server-side encryption is automatically applied to new objects stored in this bucket.

Encryption type [Info](#)

- ☒ Server-side encryption with Amazon S3 managed keys (SSE-S3)
- ☐ Server-side encryption with AWS Key Management Service keys (SSE-KMS)



Turning off block all public access might result in this bucket and the objects within becoming public
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

- ☒ I acknowledge that the current settings might result in this bucket and the objects within becoming public.

Encryption type [Info](#)

- ☒ Server-side encryption with Amazon S3 managed keys (SSE-S3)
- ☐ Server-side encryption with AWS Key Management Service keys (SSE-KMS)
- ☐ Dual-layer server-side encryption with AWS Key Management Service keys (DSSE-KMS)
Secure your objects with two separate layers of encryption. For details on pricing, see [DSSE-KMS pricing](#) on the **Storage** tab of the [Amazon S3 pricing page](#). [↗](#)

Bucket Key

Using an S3 Bucket Key for SSE-KMS reduces encryption costs by lowering calls to AWS KMS. S3 Bucket Keys aren't supported for DSSE-KMS. [Learn more](#) [↗](#)

- ☐ Disable
- ☒ Enable

► Advanced settings

[i](#) After creating the bucket, you can upload files and folders to the bucket, and configure additional bucket settings.

Cancel

Create bucket

Successfully created bucket "sharmidevopsbucket"

[View details](#)

To upload files and folders, or to configure additional bucket settings, choose [View details](#).

Amazon S3 > Buckets

► Account snapshot - updated every 24 hours All AWS Regions

[View Storage Lens dashboard](#)

Storage lens provides visibility into storage usage and activity trends. [Learn more](#) [↗](#)

General purpose buckets

Directory buckets

General purpose buckets (2) Info All AWS Regions

[↻](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

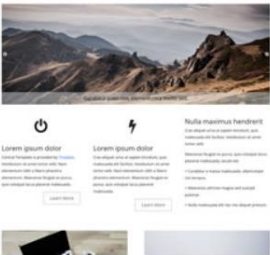
[<](#) [1](#) [>](#) [⚙](#)

Name	▲	AWS Region	▼	IAM Access Analyzer	Creation date	▼
<input type="radio"/> guvidemobucket		Asia Pacific (Mumbai) ap-south-1		View analyzer for ap-south-1	July 4, 2024, 11:20:25 (UTC+05:30)	
<input type="radio"/> sharmidevopsbucket		Asia Pacific (Mumbai) ap-south-1		View analyzer for ap-south-1	July 4, 2024, 11:45:34 (UTC+05:30)	

Already we download it in tooplate.com and unzip it .put it in laptop


tooplate.com

Afee | WebAdvisor We tested this page and blocked content coming from potentially dangerous or risky sites. Allow this content only if you're safe sites.




Central Bootstrap 4

Central is one-page Bootstrap 4 layout. It is simple HTML template that can be used for any kind of website. It has a...



Artist Minimal Page

Artist is a minimal Bootstrap theme with a subtle parallax effect. It has animated contents with a slide up effect....



Health Center

Health HTML Template includes 2 pages. Main page features different sections and news page is a 2-column content page.

Health Center Template

Health HTML Template includes 2 pages. Main page features different sections and news page is a 2-column content page. You are allowed to use this template for your commercial project. You can [read more](#) about Health Center template free usage rights.

Created: 08 March 2018 Views: 120,216 Downloads: 24,782

[Live View](#)

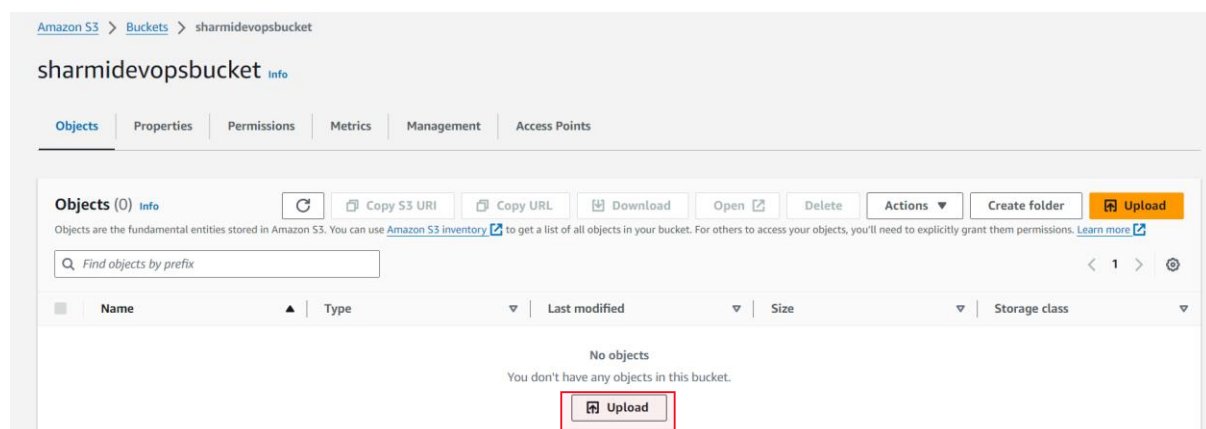
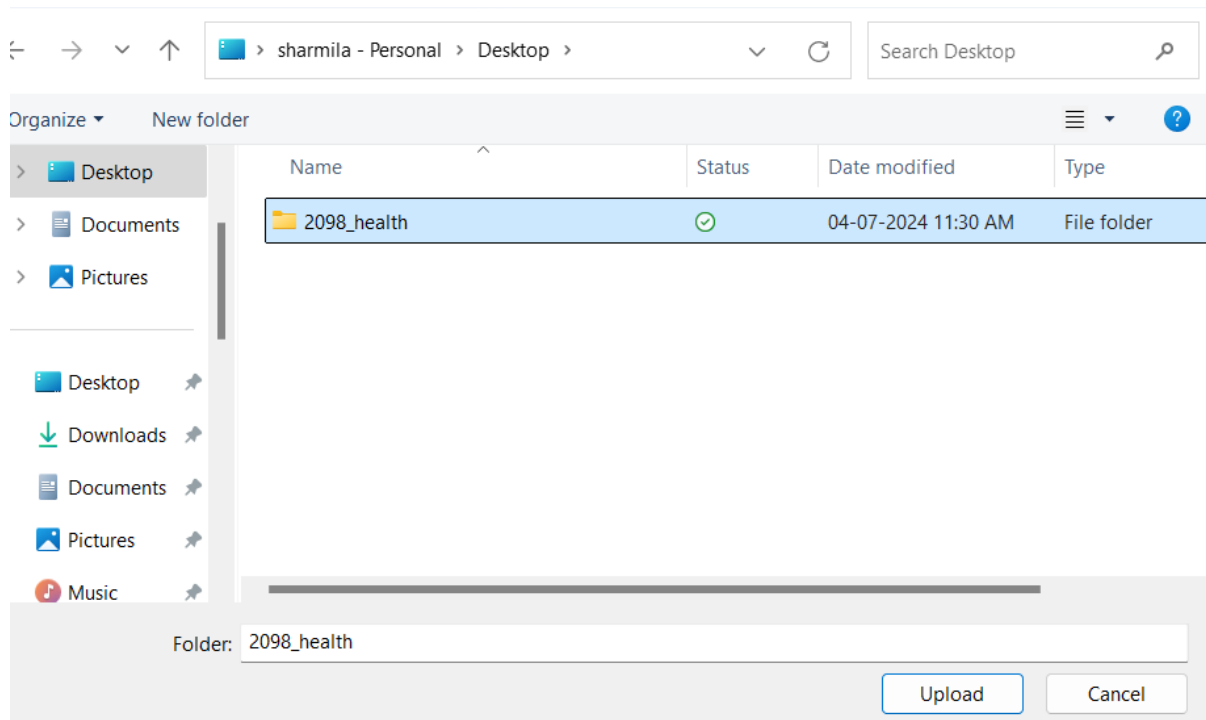
[Download](#)

[Full-size Screenshot](#)

[Contact Form PHP Script](#)

[Too CSS Blog](#)

After download in laptop unzip it.then only upload in my bucket.



Upload [Info](#)

Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)

Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.

Files and folders (0)

[Remove](#)[Add files](#)[Add folder](#)

All files and folders in this table will be uploaded.

[<](#) 1 [>](#)

<input type="checkbox"/>	Name	Folder	Type
--------------------------	------	--------	------

No files or folders

You have not chosen any files or folders to upload.

Files and folders (36 Total, 2.3 MB)

[Remove](#)[Add files](#)[Add folder](#)

All files and folders in this table will be uploaded.

[<](#) 1 2 3 4 [>](#)

<input type="checkbox"/>	Name	Folder	Type
<input type="checkbox"/>	smoothscroll.js	2098_health/js/	text/javascript

Destination [Info](#)

Destination

s3://sharmidevopsbucket

► Destination details

Bucket settings that impact new objects stored in the specified destination.

► Permissions

Grant public access and access to other AWS accounts.

► Properties

Specify storage class, encryption settings, tags, and more.

[Cancel](#)[Upload](#)







✔ Upload succeeded
View details below.

Files and folders

Configuration

Files and folders (36 Total, 2.3 MB)

🔍 Find by name

Name	Folder ▾	Type ▾	Size ▾	Status ▾	Error
ABOUT THI...	2098_health/	text/plain	453.0 B	✔ Succeeded	-
index.html 	2098_health/	text/html	24.1 KB	✔ Succeeded	-
news-detail...	2098_health/	text/html	14.4 KB	✔ Succeeded	-
bootstrap.m... 	2098_healt...	text/javascript	36.0 KB	✔ Succeeded	-
custom.js 	2098_healt...	text/javascript	893.0 B	✔ Succeeded	-
jquery.js 	2098_healt...	text/javascript	83.7 KB	✔ Succeeded	-
jquery.stella...	2098_healt...	text/javascript	12.3 KB	✔ Succeeded	-
jquery.sticky... 	2098_healt...	text/javascript	7.1 KB	✔ Succeeded	-
owl.carousel...	2098_healt...	text/javascript	41.8 KB	✔ Succeeded	-
smoothscrol... 	2098_healt...	text/javascript	4.4 KB	✔ Succeeded	-

✔ Upload succeeded
View details below.

Upload: status

Close

🔔 The information below will no longer be available after you navigate away from this page.

Summary

Destination
s3://sharmidevopsbucket

Succeeded
✔ 36 files, 2.3 MB (100.00%)

Failed
⊖ 0 files, 0 B (0%)

Files and folders

Configuration

Files and folders (36 Total, 2.3 MB)

🔍 Find by name

< 1 2 3 4 >

Name	Folder ▾	Type ▾	Size ▾	Status ▾	Error ▾
ABOUT THI...	2098_health/	text/plain	453.0 B	✔ Succeeded	-

Objects Properties

Objects (7) Info

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you

Find objects by prefix

<input checked="" type="checkbox"/>	Name	Type	Last modified	Size
<input checked="" type="checkbox"/>	ABOUT THIS TEMPLATE.txt	txt	June 27, 2024, 17:25:14 (UTC+05:30)	
<input checked="" type="checkbox"/>	css/	Folder	-	
<input checked="" type="checkbox"/>	fonts/	Folder	-	
<input checked="" type="checkbox"/>	images/	Folder	-	
<input checked="" type="checkbox"/>	index.html	html	June 27, 2024, 17:25:14 (UTC+05:30)	
<input checked="" type="checkbox"/>	js/	Folder	-	

Actions

- Calculate total size
- Copy
- Move
- Initiate restore
- Query with S3 Select
- Edit action
- Rename object
- Edit storage class
- Edit server-side encryption
- Edit metadata
- Edit tags
- Make public using ACL

Create folder Upload

Successfully edited static website hosting.

[Amazon S3](#) > [Buckets](#) > sharmidevopsbucket

sharmidevopsbucket Info

Objects Properties Permissions Metrics Management Access Points

Bucket overview

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

Static website hosting

Enabled

Hosting type

Bucket hosting

Bucket website endpoint

When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)

<http://sharmidevopsbucket.s3-website.ap-south-1.amazonaws.com>

Edit

[Amazon S3](#) > [Buckets](#) > [sharmidevopsbucket](#) > [2098_health/](#) > Make public



Make public [Info](#)

The make public action enables public read access in the object access control list (ACL) settings. [Learn more](#).

⚠ When public read access is enabled and not blocked by Block Public Access settings, anyone in the world can access the specified objects.

Specified objects

🔍 Find objects by name

Name ▲	Type ▼	Last modified ▼	Size ▼
 index.html 	html	July 4, 2024, 11:48:20 (UTC+05:30)	24.1 KB

Cancel

Make public

✔ Successfully edited public access
View details below.

Make public: status

Close

ⓘ The information below will no longer be available after you navigate away from this page.




Summary

Source
[s3://sharmidevopsbucket/2098_health/](#)

Successfully edited public access
✔ 1 object, 24.1 KB

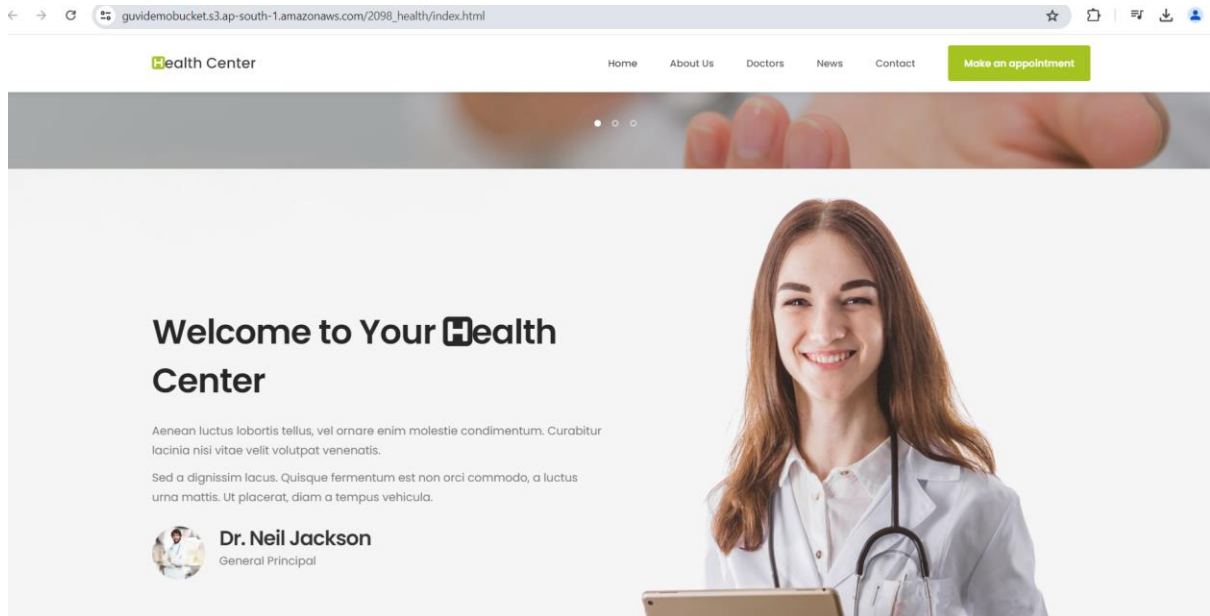
Failed to edit public access
0 objects

Get into index.html copy the url paste in browser

<input type="checkbox"/>	 index.html	html	July 4, 2024, 11:48:20 (UTC+05:30)
<input type="checkbox"/>	 js/	Folder	-
<input type="checkbox"/>	 news-detail.html	html	July 4, 2024, 11:48:20 (UTC+05:30)

Object URL

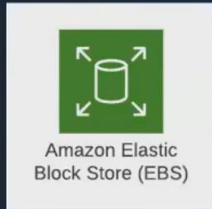
 https://sharmidevopsbucket.s3.ap-south-1.amazonaws.com/2098_health/index.html



Elastic block storage (EBS):

- if you want to expand it, if you want to increase the storage size of your Ec2. Mission, what we do. We can create elastic block storage and we can mount it to our Ec2 mission only. Not did other services
- how you mount your HD. Or SSD. You purchase it separately, and you can mount it to your laptops or your PC. Same thing. We do it here.
- if want to increase the storage, or if I want to share my storage, then I can go with elastic block storage.
- here all your data are stored in the form of blocks
- It is a block-based storage. Here it runs on the Ec2 operating system. It cannot run separately. In order to access your ebs, you have to mount it with your Ec2 mission.

ELASTIC BLOCK STORAGE



- ★ Block based storage
- ★ Runs ec2, OS, store data from db, file data, etc
- ★ Placed in specific AZ. Automatically replicated within the AZ to protect from failure.
- ★ Snapshot is backup of a volume

EBS Types

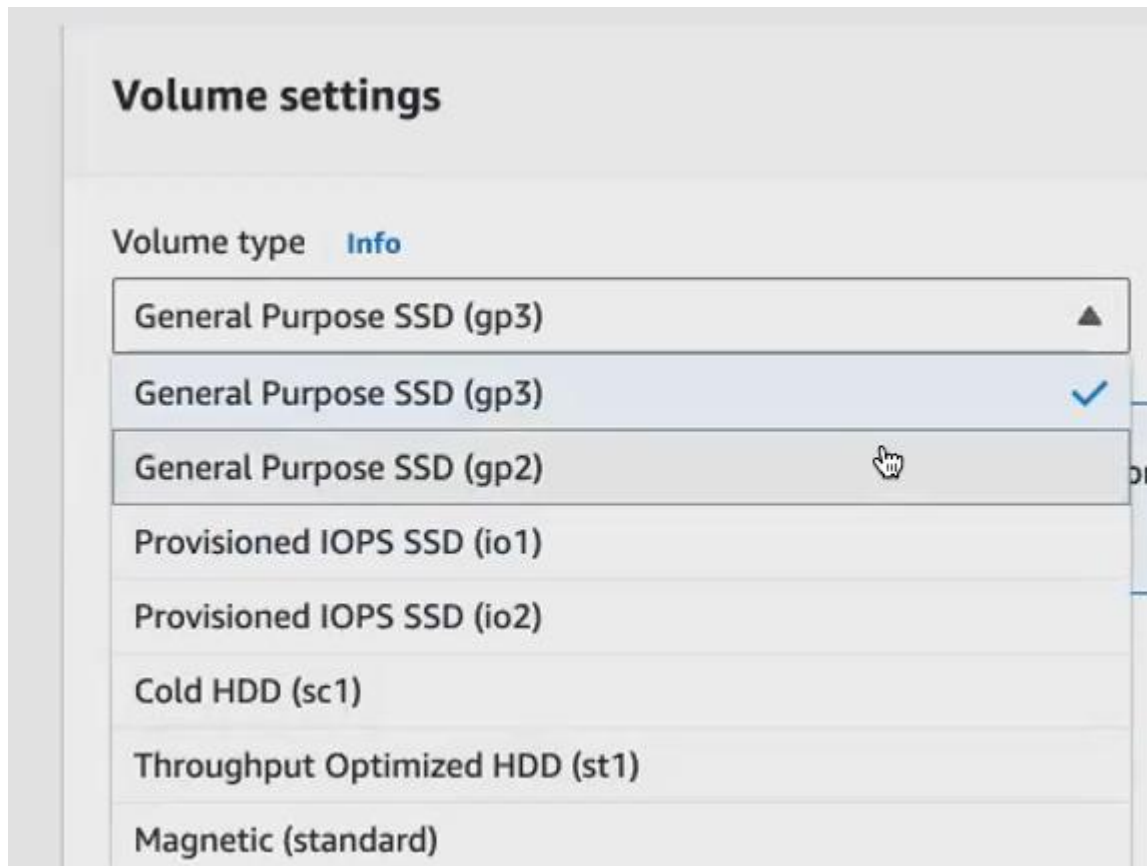
- General Purpose (SSD)
 - Most Work Loads
- Provisioned IOPS
 - Large Databases
- Throughput Optimized HD
 - Big Data & Data Warehouses
- Cold HDD
 - File Servers
- Magnetic
 - Backups & Archives

How to create elastic block storage – volume:

Goto ec2 →left side elastic block storage available→click volume

1st create a volume, that volume attached to ec2.

different types of volume type. You have GP3, GP2.



if you're using a big data application, go for throughput optimize. If you're using a large application where you it should be faster gaming kind of an application. Then you go for pro provisioned iops.

You're using a normal web based application go for general purpose

Size (GiB) [Info](#)

8

Min: 1 GiB, Max: 16384 GiB. The value must be an integer.

IOPS [Info](#)

3000

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s) [Info](#)

125


Min: 125 MiB, Max: 1000 MiB. Baseline: 125 MiB/s.

Availability Zone [Info](#)

ap-south-1a

Snapshot ID - optional [Info](#)

Don't create volume from a snapshot



- ✓ Gb 100 Gb. They have given. But for us, since we are at the retail limit we can only use still 30 Gb Of volume.
- ✓ **IOPS 3000 .it means what is the time taken for reading and writing the data inside a volume.**
- ✓ Availability zone as per given
- ✓ Snapchat not given here. we create it manually. Suppose we want, can create
- ✓ Click create volume .it can be created
- ✓ We give name for volume
- ✓ Suppose we can access that volume, that can be attached to ec2.so create new ec2.

EC2 Dashboard

EC2 Global View

Events

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

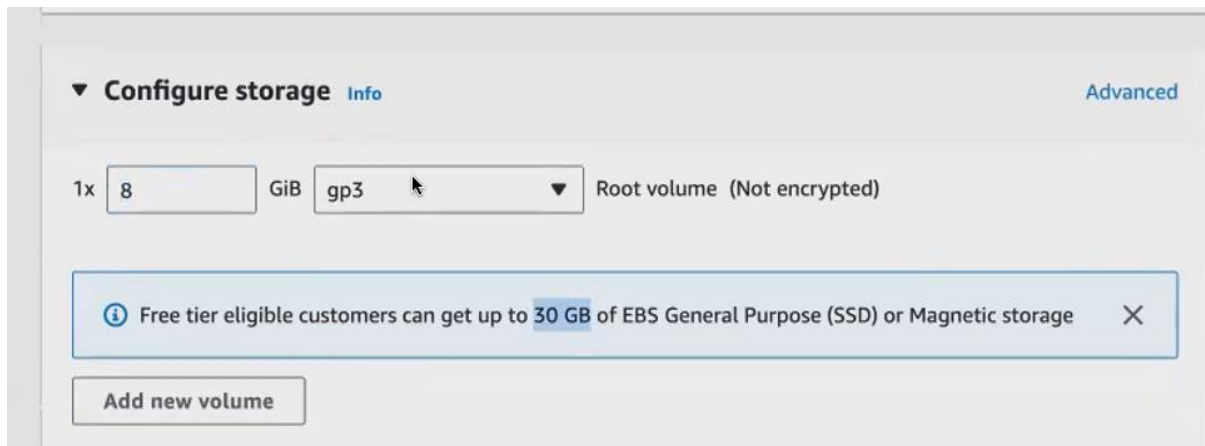
Successfully created volume vol-0e66c7ba3d16bd768.

Volumes (1/2) [Info](#)

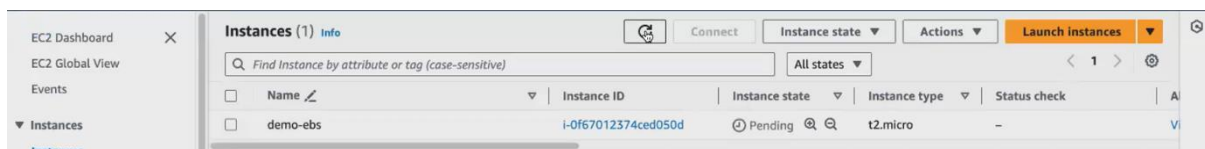
	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
<input type="checkbox"/>	EBS-Vol	vol-0026d6dcb786c23df	gp3	2 GiB	3000	125	-	2024/04/22 11:48 G
<input checked="" type="checkbox"/>	Edit Name		gp3	8 GiB	3000	125	-	2024/06/27 17:50 G

Cancel Save

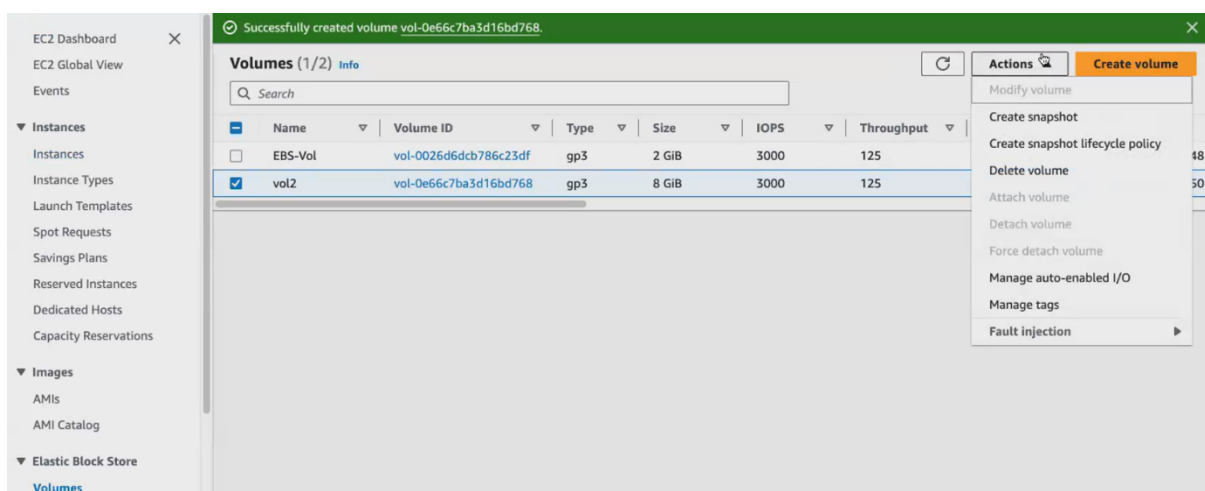
- ✓ During launch ec2 default volume can be created.
- ✓ here by default the root volume. So every machine comes with the root volume. So you get 8 Gb. Of default value. You can extend it till 30Gb.
- ✓ this is nothing but your ebs that gets attached by default with your Ec2.
- ✓ I want to increase my size, so what I can do, I can create a ebs separately, and I can mount it to my Ec2 mission. So here, since we are under free tier, you only can consume till 30 Gb.



Ec2 created (demo-ebs)

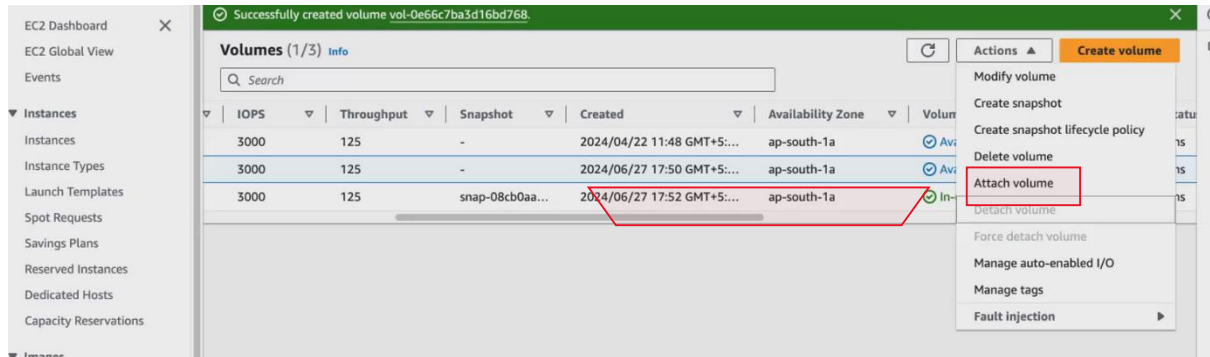


once volume is in available state ,attach volume state option available.

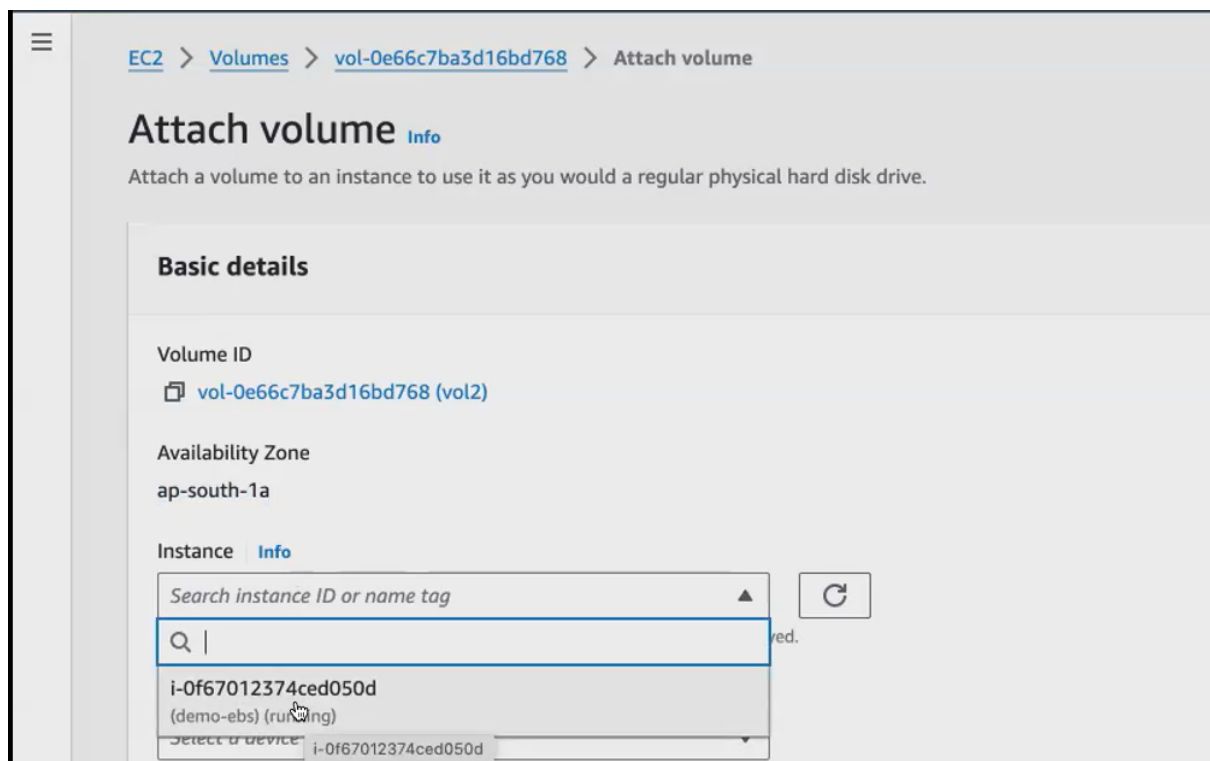


3rd row is in use volume .that means root volume created ec2 default volume created that volume shows in use.

Click attach volume



That instance name shows that means ,in the availability zone that only instance available. Click on it



For linux default we select `/dev/sdf`. Then click **attach volume**.

Device name [Info](#)

/dev/sdf

▼

Recommended device names for Linux: /dev/sda1 for root volume. /dev/sd[f-p] for data volumes.

ⓘ

Newer Linux kernels may rename your devices to **/dev/xvdf** through **/dev/xvdp** internally, even when the device name entered here (and shown in the details) is **/dev/sdf** through **/dev/sdp**.

⊗ Invalid value '/dev/sdb' for unixDevice. Attachment point /dev/sdb is already in use

Cancel

Attach volume

Basic details

Q

/dev/sdc

Linux

/dev/sdd

Linux

/dev/sde

Linux

/dev/sdf

Linux

✓

/dev/sdg

Linux

/dev/sdh

Linux

/dev/sdi

Linux

/dev/sdj

Linux

/dev/sdf

▲

Recommended device names for Linux: /dev/sda1 for root volume. /dev/sd[f-p] for data volumes.

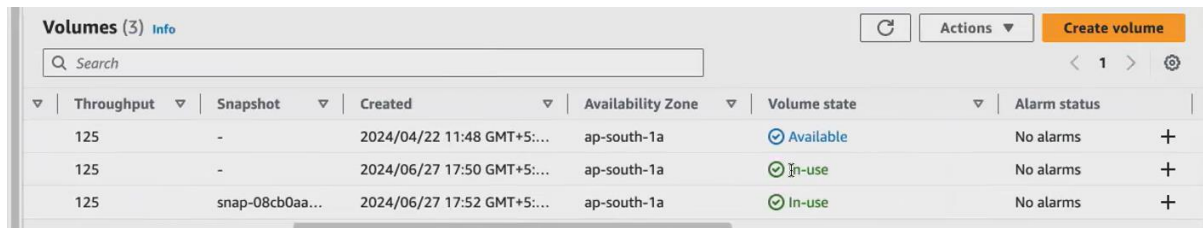
ⓘ

Newer Linux kernels may rename your devices to **/dev/xvdf** through **/dev/xvdp** internally, even when the device name entered here (and shown in the details) is **/dev/sdf** through **/dev/sdp**.

⊗ Invalid value '/dev/sdb' for unixDevice. Attachment point /dev/sdb is already in use

After attach volume to ec2 ,that volume state changed from available to in-use.(i.e)volume attached to ec2.now we attached that volume only.

We can't access or enable it. some steps can do for enable it.



Throughput	Snapshot	Created	Availability Zone	Volume state	Alarm status
125	-	2024/04/22 11:48 GMT+5:...	ap-south-1a	Available	No alarms
125	-	2024/06/27 17:50 GMT+5:...	ap-south-1a	In-use	No alarms
125	snap-08cb0aa...	2024/06/27 17:52 GMT+5:...	ap-south-1a	In-use	No alarms

we use this elastic block storage to persist your data anytime. Your Ec 2 mission, you can terminate it or you can delete it. But if you want to store the data and you want to persist the data, you can go with elastic block storage.

Now go to that instance. Connect to ec2.

how do you check the disk that has been attached to your Ec2 mission that's running inside your Linux mission. We have a command called Lsblk

```
ubuntu@ip-172-31-41-142:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0        7:0      0  25.2M  1 loop /snap/amazon-ssm-agent/7983
loop1        7:1      0  55.7M  1 loop /snap/core18/2812
loop2        7:2      0  38.7M  1 loop /snap/snapd/21465
xvda        202:0     0    8G   0 disk
├─xvda1      202:1     0    7G   0 part /
├─xvda14     202:14    0    4M   0 part 
├─xvda15     202:15    0   106M  0 part /boot/efi
└─xvda16     259:0    0   913M  0 part /boot
xvdf        202:80    0    8G   0 disk
```

Xvda -root volume

Xvdf – we created that volume. Only disk is there no partition there

Partition is not happened, and we are not mounted. Still, we have not given particular path for mountpoints.Only when you mount it the data will be stored. The data from the mount point will be shared with your disk.

1st you have to format the disk so that it can accept our data.So 1st format that this with a file system (ex2,ex3 (older vision)ext4,ext5). **Currently commonly used is ext. 4, we call it as for 4 extended file system** .so that the data can be stored inside my disk in a particular format.

```

ubuntu@ip-172-31-41-142:~$ sudo mkfs -t ext4 /dev/xvdf
mke2fs 1.47.0 (5-Feb-2023)
Creating filesystem with 2097152 4k blocks and 524288 inodes
Filesystem UUID: be5bd764-b434-4820-9c10-2098b55111a2
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

ubuntu@ip-172-31-41-142:~$

```

Mkfs – Means, make file system.

-t ext4- what type format is used ? extended file system 4 used here

/dev/xvdf – this disk formatted. **Xvdf – we created that volume**

Now ebs volume is available

Then create the mountpoint (path) to ebs volume:

/mnt/my_vol path with any folder name that created. We give anything

That mountpoint (path) to ebs volume (disk)

```

ubuntu@ip-172-31-41-142:~$ sudo mkdir /mnt/my_vol
ubuntu@ip-172-31-41-142:~$

```

Sudo mount – where I mount that volume

/dev/xvdf – in that disk we mount volume in path /mnt/my_vol

Now disk is mounted to that particular path. But this mount is temporary. If not permanent, whenever we refresh our machine that get deleted.

How to make this mount as permanent. We make it as permanent then only my data not get deleted. Access at any time. For this we update /edit a configuration.

Where do you have our all our configuration file in the Linux Machine? All configuration folder inside etc folder?

- in the Root Directory, you have lot of system files.
- inside your etc folder, you have your configuration files.
- inside your bin folder and/sbin Folder, you have all your Linux commands. all the binaries (i.e.)the executable binaries will be there inside your bin folder, and as well folder
- inside your prop folder you have all your system related information same way inside your, etc folder. You have all your configuration files

```
ubuntu@ip-172-31-41-142:~$ sudo mount /dev/xvdf /mnt/my_vol
ubuntu@ip-172-31-41-142:~$
```

- Now, I want to change my file systems configuration. So I want to update the file system inside etc folder.
- How to make this mount as permanent. For this we update /edit a configuration. for this we use nano /vi editor

```
ubuntu@ip-172-31-41-142:~$ sudo nano /etc/fstab
```

```
GNU nano 7.2 /etc/fstab *
LABEL=cloudimg-rootfs / ext4 discard,commit=30,errors=remount-ro 0 1
LABEL=BOOT /boot ext4 defaults 0 2
LABEL=UEFI /boot/efi vfat umask=0077 0 1
/dev/xvdf /mnt/my_vol ext4 defaults 0 2
```

/dev/xvdf – disk name

/mnt/my_vol - mountpoint (path)

Ext4 - extended file system 4. specific fs name we give

default means - optional flags that you attach. You're giving it for this ebs vol. When you give default, which means I can perform read, write, operation, execute operation, sync operation. all those operations I can perform on this this.

0 - means your file system should not be dumped.

2/1- means while booting up ,when will my volume will check .suppose we have attach 2 ebs vol (root vol, my custom vol)

1- means 1st my vol checked then root vol checked.

2- means 1st root vol checked then my vol checked. Instead of 2 , 1 also give

For check m.p mounted or now. Give cmd lsblk.now m.p mounted

```
ubuntu@ip-172-31-41-142:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0        7:0      0 25.2M  1 loop /snap/amazon-ssm-agent/7983
loop1        7:1      0 55.7M  1 loop /snap/core18/2812
loop2        7:2      0 38.7M  1 loop /snap/snapd/21465
xvda         202:0     0   8G   0 disk
├─xvda1      202:1     0    7G   0 part /
├─xvda14     202:14    0    4M   0 part
├─xvda15     202:15    0 106M   0 part /boot/efi
└─xvda16     259:0     0  913M   0 part /boot
xvdf         202:80    0   8G   0 disk /mnt/my_vol
```

This command gives complete details of ebs volume

```
ubuntu@ip-172-31-41-142:~$ sudo fdisk -l
Disk /dev/loop0: 25.23 MiB, 26456064 bytes, 51672 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/loop1: 55.66 MiB, 58363904 bytes, 113992 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/loop2: 38.73 MiB, 40615936 bytes, 79328 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/xvda: 8 GiB, 8589934592 bytes, 16777216 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
```

```
Disk /dev/xvdf: 8 GiB, 8589934592 bytes, 16777216 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
ubuntu@ip-172-31-41-142:~$
```

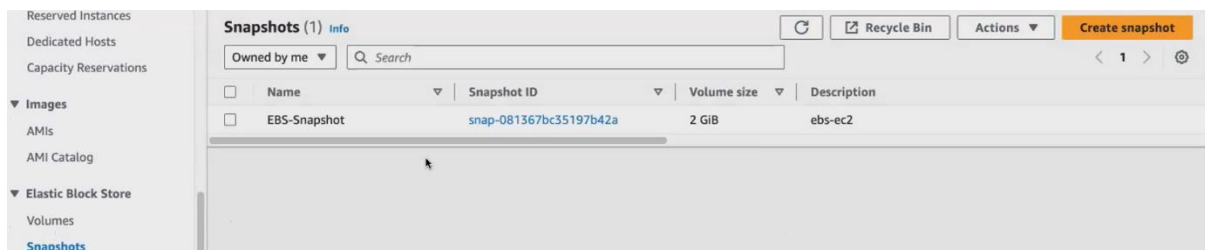
Yasmine ebs vol documentation

<https://docs.google.com/document/d/1gTMGBG4tkiQrYAsXsGoE9RbAj5MsSU9Bzi9ahh2B-0E/edit>

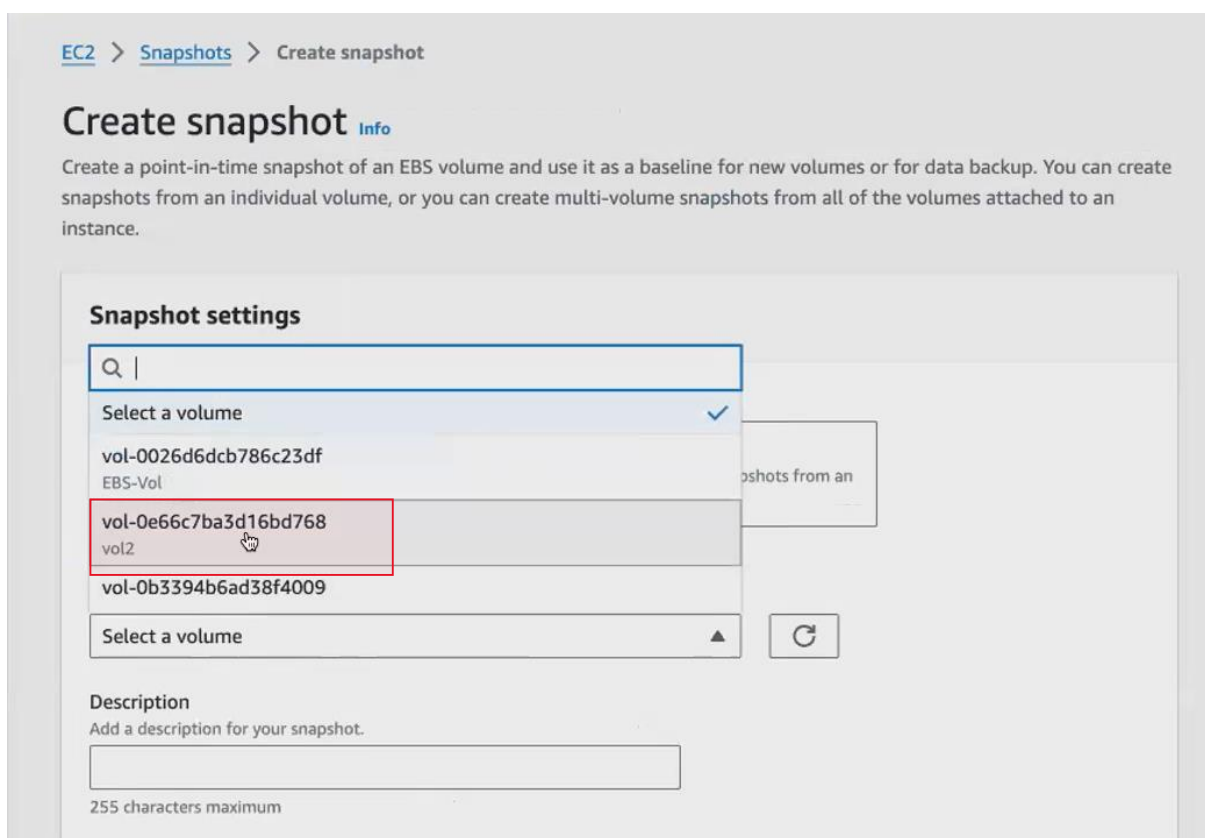
EBS – SNAPSHOT:

you want to share this data or use this ebs volume to a different to a diff ec2, which is located in a different availability zone or a region. You can go with snapshot. you can convert your ebs volume into a snapshot

- snapshot, is like taking a backup and also sharing your Ebs volume with different region or different availabilities.



Select name of my vol



Volume ID
The volume from which to create the snapshot.

vol-0e66c7ba3d16bd768

Description
Add a description for your snapshot.

mynewvolumess

255 characters maximum

Encryption [Info](#)
Not encrypted

Tags [Info](#)
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

No tags associated with the resource.

[Add tag](#)
You can add 50 more tags.

[Cancel](#) [Create snapshot](#)

Give name of my ebs vol snapchat

EC2 Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Successfully created snapshot snap-038b3666Se236d91d.

Snapshots (1/2) [Info](#)

Owned by me Search

	Name	Snapshot ID	Volume size	Description
<input checked="" type="checkbox"/>	Edit Name	j65e236d91d	8 GiB	mynewvolumess
<input type="checkbox"/>	EBS-S vol2-snapshot	xc35197b42a	2 GiB	ebs-ec2

[Cancel](#) [Save](#)

- ✓ snapshot is created for that volume. using this snapshot, I can attach my Ebs volume to a different, the Ec.2.
- ✓ now I have created a snapshot out of my existing volume.
- ✓ you have taken the snapshot. So, this snapshot will contain all the data that is there in my volume.
- ✓ Assume that you have stored some data to this volume, and you have taken the snapshot.
- ✓ Click my snapchat→ snapchat id.Let me go and fetch the id of the snapshot that I created
- ✓ just get into your snapshot click on actions. You have an option called create volume from the snapshot.so, you can create a volume from the same snapshot, but in a different availability zone you have to create.

EC2 Dashboard		Snapshots (1/2) Info		Refresh	Recycle Bin	Actions	Create snapshot
Owned by me		<input type="text" value="Search"/>		< 1 >			
<input checked="" type="checkbox"/>	Name	Snapshot ID	Volume size	Description			
<input checked="" type="checkbox"/>	vol2-snapshot	snap-038b36665e236d91d	8 GiB	mynewvolumess			
<input type="checkbox"/>	EBS-Snapshot	snap-081367bc35197b42a	2 GiB	ebs-ec2			

EC2 Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

▼ Images

AMIs

EC2 > Snapshots > snap-038b36665e236d91d

snap-038b36665e236d91d (vol2-snapshot)

Snapshot ID

snap-038b36665e236d91d (vol2-snapshot)

Owner

150878085644

Encryption

Not encrypted

Fast snapshot restore

-

Volume size

8 GiB

Volume ID

vol-0e66c7ba3d16bd768

KMS key ID

-

Description

mynewvolumess

Progress

Available (100%)

Started

Thu Jun 27 2024 18:16:54 GMT+0530 (India Standard Time)

KMS key alias

-

KMS key ARN

-

Refresh

Delete

Actions

Create volume from snapshot

Create image from snapshot

Copy snapshot

Snapshot settings

Archiving

already we given that region for my volume. Now select diff availability zone

Size (GiB) [Info](#)

Min: 1 GiB, Max: 16384 GiB. The value must be an integer.

IOPS [Info](#)

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s) [Info](#)

Min: 125 MiB, Max: 1000 MiB. Baseline: 125 MiB/s.

Availability Zone [Info](#)

▼

Fast snapshot restore [Info](#)

☒ Not enabled for selected snapshot

Encryption

Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.

☐ Encrypt this volume

Size (GiB) [Info](#)

Min: 1 GiB, Max: 16384 GiB. The value must be an integer.

IOPS [Info](#)

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s) [Info](#)

Min: 125 MiB, Max: 1000 MiB. Baseline: 125 MiB/s.

Availability Zone [Info](#)

Fast snapshot restore [Info](#)

☐ Not enabled for selected snapshot

Tags - optional [Info](#)

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key	Value - optional	
<input type="text" value="name"/>	<input type="text" value="newvolume"/>	<input type="button" value="Remove"/>
	Use "newvolume"	

You can add 49 more tags.

Snapshot summary

Click refresh to view backup information

The volume type that you select and the tags that you assign determine whether the volume will be backed up by any Data Lifecycle Manager policies.

Now volume created with snapchat with diff region

The first screenshot shows the 'Volumes (1/4) Info' page with a single volume 'vol-05ed99bdbc1a004ae' of type 'gp3', size '8 GiB', IOPS '3000', and throughput '125'. The snapshot is 'snap-038b36665e236d91d'.

The second screenshot shows the 'Volumes (1/4) Info' page with a list of volumes. The first volume is 'vol-05ed99bdbc1a004ae' of type 'gp3', size '8 GiB', IOPS '3000', and throughput '125'. The snapshot is 'snap-038b36665e236d91d'. The second volume is 'vol-0b3394b6ad38f4009' of type 'gp3', size '8 GiB', IOPS '3000', and throughput '125'. The snapshot is 'snap-038b36665e236d91d'.

How to share this v-snapshot with diff region:

- ✓ EBS is limited to a single availability zone and ec2. we cant share with multiple R and ec2. so we have another option called as EFS.
- ✓ where you can use EFS, you can share EFS simultaneously. At the same time, you can share the EFS with multiple Ec2. You can share it across multiple EC2 and regions.

Finally del all volumes ,because its chargeable. 1st detach vol & del.

The screenshot shows the 'Volumes (1/3) Info' page with a green banner at the top stating 'Successfully deleted volume vol-05ed99bdbc1a004ae.' The main table lists three volumes: 'EBS-Vol' (vol-0026d6dcb786c23df), 'vol2' (vol-0e66c7ba3d16bd768), and 'vol-0b3394b6ad38f4009'. The 'vol2' volume is selected, and the 'Detach volume' action is highlighted in the 'Actions' dropdown menu.

