



ASSIGNMENT – 01

COURSE : DEVOPS

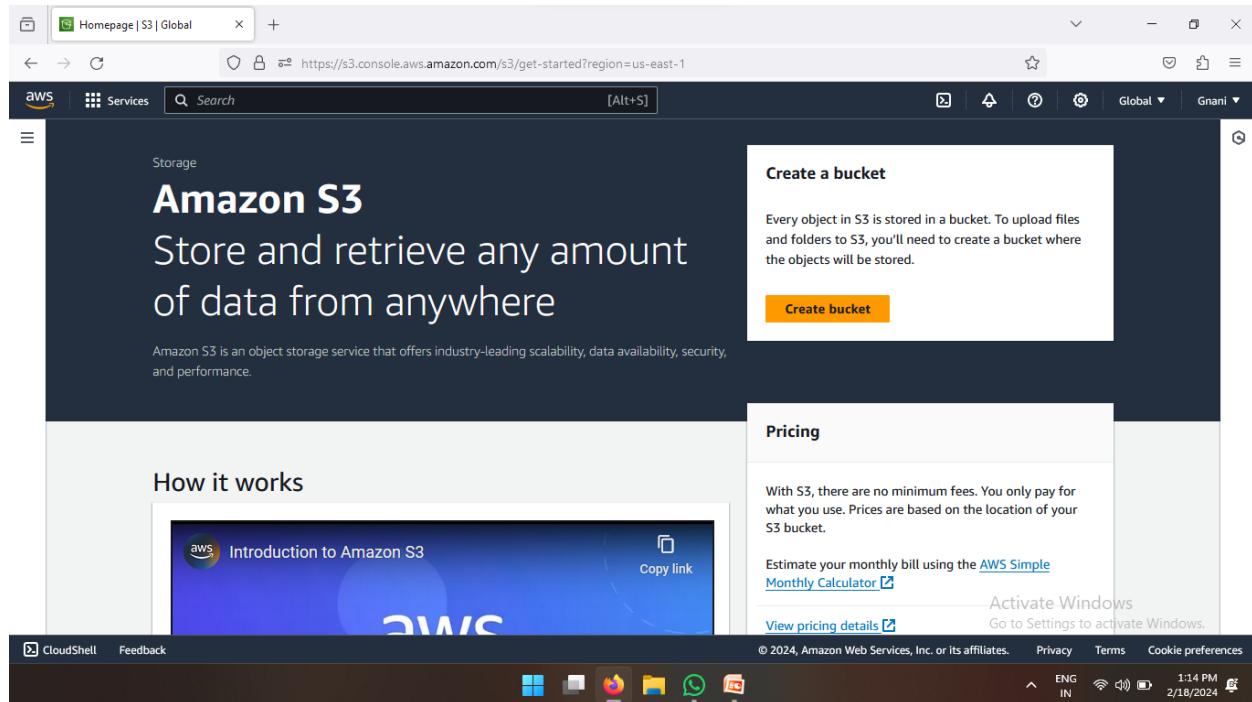
Trainer : Mr . MADHUKAR

NAME : R LAKSHMI

Mail id : ravurilakshmi2315@gmail.com

1 . Create a S3 bucket and enable cross region replication for any two buckets in different regions ?

- Go to Amazon S3 , Click on Create Bucket



- Enter Bucket Name and Select Any one Region

The screenshot shows the 'Create bucket' page in the AWS S3 console. The 'General configuration' section is visible, containing fields for 'AWS Region' (set to 'US East (N. Virginia) us-east-1'), 'Bucket type' (with 'General purpose' selected), and 'Bucket name' (set to 'myawsbucket'). A note at the bottom of this section states: 'Bucket name must be unique within the global namespace and follow the bucket naming rules. [See rules for bucket naming](#)'.

- Enable Bucket Version

The screenshot shows the 'Create bucket' page with additional settings visible. Under 'Advanced settings', there is a checkbox for 'Block public and cross-account access to buckets and objects through *any* public bucket or access point policies'. Below this, the 'Bucket Versioning' section is shown, with 'Disable' selected. The 'Tags - optional (0)' section indicates 'No tags associated with this bucket.'

- After that Click on Create Bucket

The screenshot shows the 'Create S3 bucket' wizard on the AWS S3 service. In the 'Encryption type' section, 'Server-side encryption with Amazon S3 managed keys (SSE-S3)' is selected. Below it, 'Bucket Key' settings show 'Enable' selected. A note indicates that using an S3 Bucket Key for SSE-KMS reduces costs but notes that S3 Bucket Keys aren't supported for DSSE-KMS. Under 'Advanced settings', there's a note about uploading files after creation. At the bottom right is a prominent orange 'Create bucket' button.

- One more bucket created in different region.

- Now see the 2 Buckets in different region

The screenshot shows the 'Amazon S3' service page with the 'General purpose buckets' tab selected. It lists two buckets: 'assignment-120batch-1' and 'assignment-120batch-2'. Both were created on February 19, 2024, at different times. The table includes columns for Name, AWS Region, Access, and Creation date.

Name	AWS Region	Access	Creation date
assignment-120batch-1	US East (N. Virginia) us-east-1	Bucket and objects not public	February 19, 2024, 22:44:04 (UTC+05:30)
assignment-120batch-2	US East (Ohio) us-east-2	Bucket and objects not public	February 19, 2024, 22:46:22 (UTC+05:30)

- Now go to first bucket and click on upload

The screenshot shows the AWS S3 console with a green success message: "Successfully created folder 'assignment1'." The left sidebar lists various AWS services like EC2, IAM, and Storage Lens. The main content area shows the "assignment-120batch-1" bucket with one object named "assignment1/". The status bar at the bottom indicates it's 27°C, partly cloudy, and the date is 2/19/2024.

- Then Add Files and Add Folders then upload

The screenshot shows the AWS S3 "Upload objects" interface. A single file, "GMT20240208-104348_Recording_1920x...", is selected for upload. The destination is set to "s3://assignment-120batch-1". The "Destination details" section shows bucket settings. The "Permissions" and "Properties" sections are also visible. The status bar at the bottom indicates it's 27°C, partly cloudy, and the date is 2/19/2024.

The screenshot shows the AWS S3 console interface for uploading objects. At the top, a progress bar indicates "Uploading" with "Total remaining: 1 file: 51.1 MB (60.92%)". Below the progress bar is a "Summary" table:

Destination	Succeeded	Failed
s3://assignment-120batch-1	0 files, 32.8 MB (39.08%)	0 files, 0 B (0%)

Below the summary is a "Files and folders" section showing one item: "GMT202402... video/mp4 83.8 MB In progress (41)". The status "In progress (41)" is highlighted in yellow.

At the bottom of the window, there is a toolbar with icons for CloudShell, Feedback, and various system status indicators like battery level and network connection.

- Click on Upload

- Uploading Files and Folders

The screenshot shows the AWS S3 console interface for a batch upload process. The title bar says "Upload objects - S3 bucket assi... X". The main area displays a table of files and folders to be uploaded:

Name	Folder	Type	Size	Status
GMT202402...	-	video/mp4	83.8 MB	In progress (41)

Below the table, there is a "Destination" section with the destination set to "s3://assignment-120batch-one". The "Upload" button is prominently displayed at the bottom right of the main content area.

At the bottom of the window, there is a toolbar with icons for CloudShell, Feedback, and various system status indicators like battery level and network connection.

The screenshot shows the AWS S3 console with a green header bar indicating "Upload succeeded". Below it, a summary table shows 2 files uploaded successfully (Succeeded) and 0 files failed. A detailed table below lists two files: "pan" and "pan", both in the "ashok/lak/" folder, each with a size of 228.0 B and a status of "Succeeded". The interface includes tabs for "Files and folders" and "Configuration".

- Now go to Management in first bucket (or) Source Bucket

The screenshot shows the AWS S3 Management Console for the "assignment-120batch-1" bucket. The "Objects" tab is selected, displaying three objects: "ashok/", "assignment1/", and "lakshmi132 (2) (1) (1).pdf". The "lakshmi132 (2) (1) (1).pdf" file is a PDF document, 321.3 KB in size, last modified on February 19, 2024, at 22:55:02 (UTC+05:30), and has the storage class set to Standard. The interface includes tabs for "Objects", "Properties", "Permissions", "Metrics", "Management", and "Access Points".

- In Management Console click on create Replication Rule

Replication rules (0)

Use replication rules to define options you want Amazon S3 to apply during replication such as server-side encryption, replica ownership, transitioning replicas to another storage class, and more. [Learn more](#)

C View details Edit rule Delete Actions ▾ Create replication rule

Replication rule name	Status	Destination bucket	Destination Region	Priority	Scope	Storage class	Replica owner	Replication Time Control	KMS-encrypted objects (SSE-KMS or DSSE-KMS)	Replica modification sync
No replication rules										
You don't have any rules in the replication configuration.										
Create replication rule										

Inventory configurations (0)

You can create inventory configurations on a bucket to generate a flat file list of your objects and metadata. These scheduled reports can include all objects in the bucket or be limited to a shared prefix. [Learn more](#)

C Edit Delete Create job from manifest Create inventory configuration

Name	Status	Scope	Destination	Frequency	Last export	Activate Windows	Format
Go to Settings to activate Windows.							

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- Enter Replication rule name

Create replication rule [Info](#)

Replication rule configuration

Replication rule name
Enter rule ID

Status
Choose whether the rule will be enabled or disabled when created.
 Enabled
 Disabled

Priority
The priority value resolves conflicts that occur when an object is eligible for replication under multiple rules to the same destination. The rule is added to the configuration at the highest priority and the priority can be changed on the replication rules table.
0

Source bucket

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- Click on Apply to all objects in he bucket

Source bucket

Source bucket name
assignment-120batch-one

Source Region
US East (N. Virginia) us-east-1

Choose a rule scope

Limit the scope of this rule using one or more filters

Apply to all objects in the bucket

Filter type

You can filter objects by prefix, object tags, or a combination of both.

Prefix

Add a filter to limit the scope of this rule to a single prefix.

Enter prefix

Don't include the bucket name in the prefix. Using certain characters in key names can cause problems with some applications and protocols.

Tags

You can limit the scope of this rule to the key value pairs added below.

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- Now Choose Destination where ever you want to see the data
- Choose a bucket in this account

Destination

Destination

You can replicate objects across buckets in different AWS Regions (Cross-Region Replication) or you can replicate objects across buckets in the same AWS Region (Same-Region Replication). You can also specify a different bucket for each rule in the configuration. [Learn more](#) or see [Amazon S3 pricing](#).

Choose a bucket in this account

Specify a bucket in another account

Bucket name

Choose the bucket that will receive replicated objects.

Enter bucket name

Browse S3

Destination Region

-

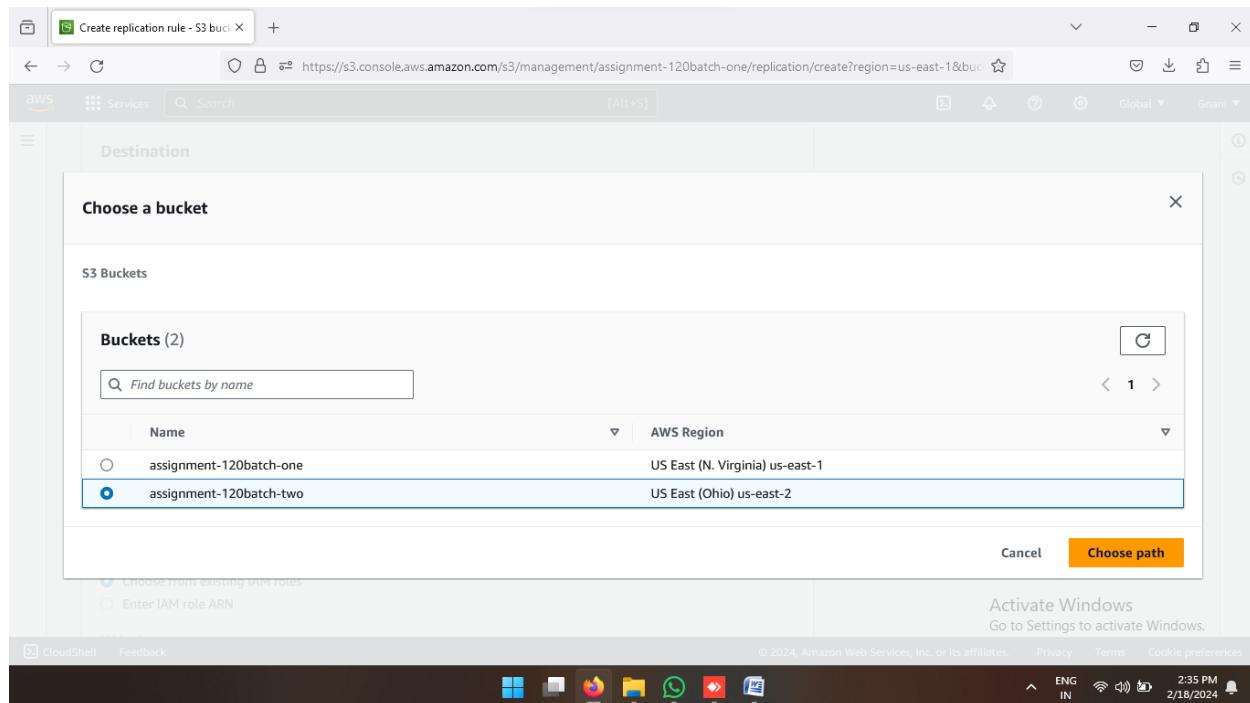
IAM role

Choose from existing IAM roles

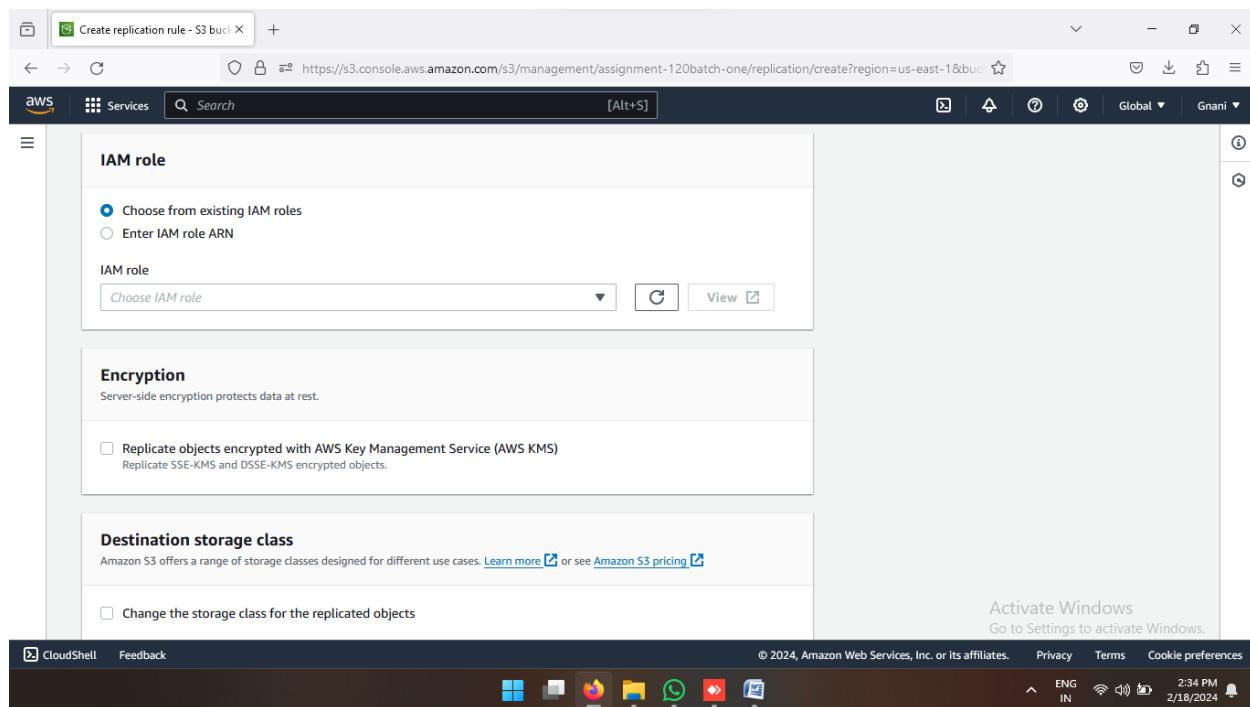
Enter IAM role ARN

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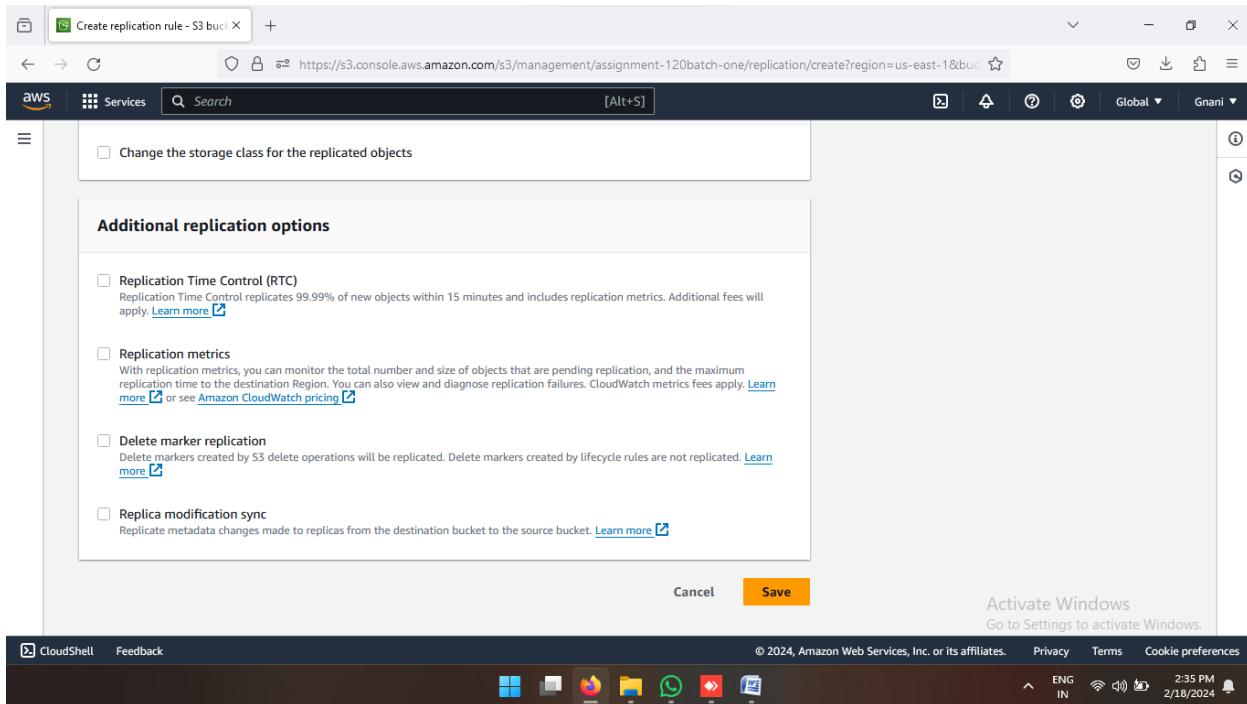
- Select another region Bucket (or) Where ever you want to see the data that bucket select and click on choose path



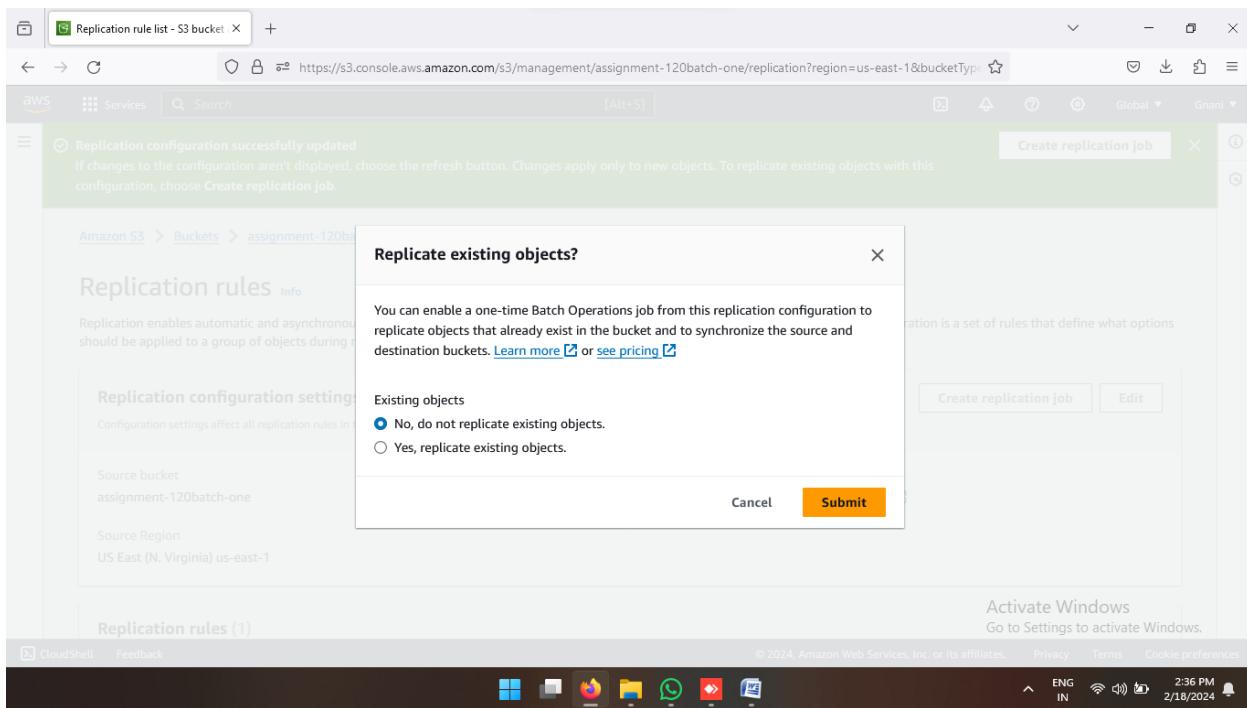
- Now choose from existing IAM roles
- Select Drop down Create a new role



- Then Save the Replication Rule



- Now if you want see the existing data then click on Yes
- If you don't want to see the existing data then click on No then submit



- If You Click yes then choose the destination path again and click on save button

Completion report

Generate a CSV completion report that lists your target objects, task success or error codes, outputs, and descriptions. Completion reports are encrypted using SSE-S3. [Learn more](#)

Generate completion report

Completion report scope

Failed tasks only

All tasks

Completion report destination

Specify a general purpose bucket location to store the completion report. '/job-[job-id]/report.json' will automatically be appended to the specified destination. [Learn more](#)

s3://bucket-name/prefix [View](#) [Browse S3](#)

Format: s3://<bucket>/<optional-prefix-with-path>. S3 will append the path with a '/'. If you add a '/' to the prefix, it will appear as an extra folder in the S3 console.

Permissions

Choose an IAM role with the [required access permissions and trust relationships](#). An IAM role policy template based on your job configuration, and the IAM trust policy required for batch operations to assume the IAM role are available below. [Learn more about IAM roles](#)

[View IAM role policy template and IAM trust policy](#)

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Choose a completion report destination

S3 Buckets

Buckets (2)	
Name	AWS Region
<input type="radio"/> assignment-120batch-one	US East (N. Virginia) us-east-1
<input checked="" type="radio"/> assignment-120batch-two	US East (Ohio) us-east-2

[View IAM role policy template and IAM trust policy](#)

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Completion report destination
Specify a general purpose bucket location to store the completion report. '/job-{job-id}/report.json' will automatically be appended to the specified destination. [Learn more](#)

s3://assignment-120batch-two

Format: s3://<bucket>/<optional-prefix-with-path>. S3 will append the path with a "/". If you add a "/" to the prefix, it will appear as an extra folder in the S3 console.

Permissions
Choose an IAM role with the [required access permissions and trust relationships](#). An IAM role policy template based on your job configuration, and the IAM trust policy required for batch operations to assume the IAM role are available below. [Learn more about IAM roles](#)

▶ View IAM role policy template and IAM trust policy

Choose from existing IAM roles
 Enter IAM role ARN

IAM role
Create new role

Activate Windows
Go to Settings to activate Windows.

- After Save Button Click then one batch Operation Created that status is showing Preparing.
- Status is changed active then we can see the data into the destination bucket.

Successfully created job ID 8ae4f34a-052d-4ba7-868c-edde3db8247a
The time it takes to prepare a job is based on the size of the job's manifest and the time required to complete higher-priority jobs.

Batch Operations [Info](#)

A job is used to execute batch operations on a list of S3 objects. The list of S3 objects is contained in a manifest object, which can be an S3 inventory report or a list of objects that you generate. After the total number of objects listed in the manifest has been confirmed, the job status will update to *Awaiting your confirmation to run*, and you must *Run job* within 30 days. Job events are published to [CloudWatch Events](#). Jobs are deleted 90 days after they finish or fail. [Learn more](#)

Jobs (1)									
<input type="text" value="Search by job ID or description"/>		<input type="button" value="All status types"/>							
Job ID	Status	Description	Operation	Date created	Total objects	% Complete	Total failed (rate)	Priority	
8ae4f34a-052d-4ba7-868c-edde3db8247a	Preparing	2024-02-18 - Replicate	Replicate	February 18, 2024, 14:39:19 (UTC+05:30)	0	0%	0 (0%)	10	

Activate Windows
Go to Settings to activate Windows.

The screenshot shows the AWS S3 Batch Operations console. At the top, a green banner indicates "Successfully created job ID 8ae4f34a-052d-4ba7-868c-edde3db8247a". Below the banner, the "Batch Operations" page is displayed with the heading "Jobs (1)". A table lists the job details:

Job ID	Status	Description	Operation	Date created	Total objects	% Complete	Total failed (rate)	Priority
8ae4f34a-052d-4ba7-868c-edde3db8247a	Active	2024-02-18 - Replicate	Replicate	February 18, 2024, 14:39:19 (UTC+05:30)	13	0%	0 (0%)	10

At the bottom of the page, there is a message: "Activate Windows" and "Go to Settings to activate Windows." The AWS navigation bar at the top includes services like CloudShell and Feedback.

- Whenever Batch Operation Active go to Destination Bucket and see the data.

The screenshot shows the AWS S3 buckets console. On the left, the sidebar lists options like Buckets, Access Grants, and Storage Lens. The main area displays the "Amazon S3" dashboard with an "Account snapshot" section and a table of "General purpose buckets".

Name	AWS Region	Access	Creation date
assignment-120batch-1	US East (N. Virginia) us-east-1	Bucket and objects not public	February 19, 2024, 22:44:04 (UTC+05:30)
assignment-120batch-2	US East (Ohio) us-east-2	Bucket and objects not public	February 19, 2024, 22:46:22 (UTC+05:30)

The AWS navigation bar at the top includes services like CloudShell and Feedback.

- Now See the data in Destination Bucket.

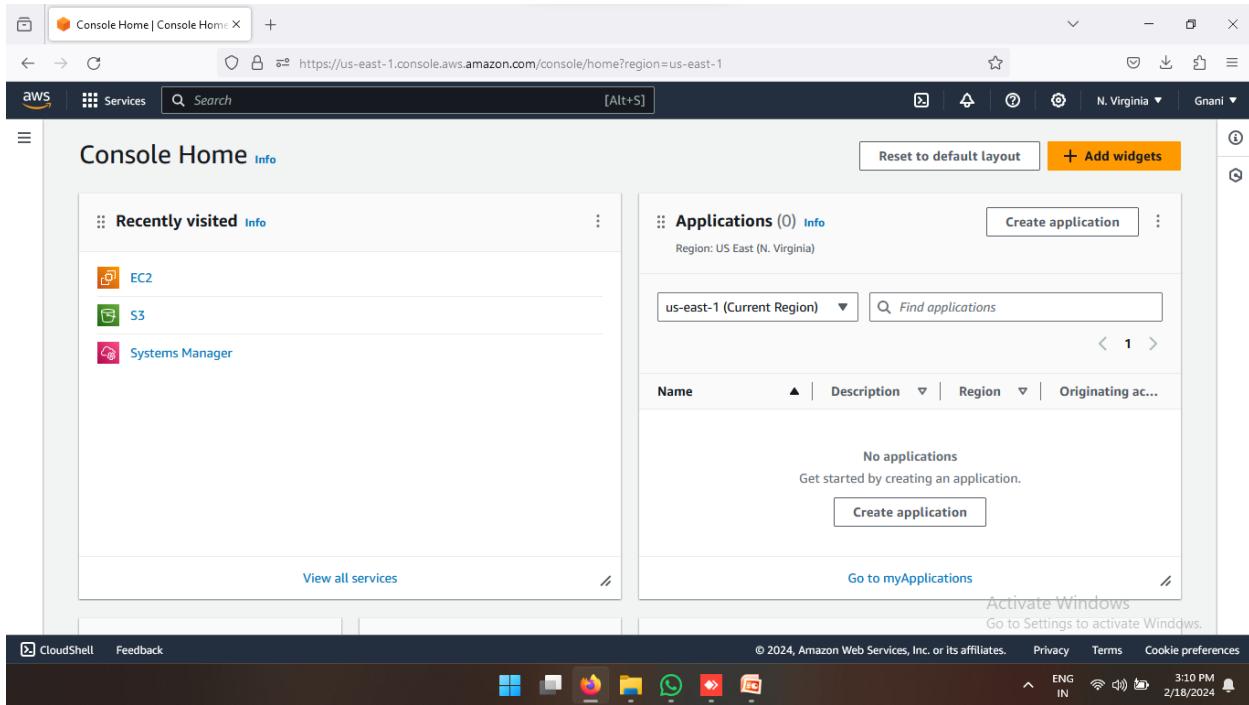
The screenshot shows the AWS S3 console interface. The left sidebar is collapsed, and the main area displays the contents of the 'assignment-120batch-2' bucket. The 'Objects' tab is active, showing two items:

Name	Type	Last modified	Size	Storage class
GMT20240208-104348_Recording_1920x1080.mp4	mp4	February 19, 2024, 22:50:49 (UTC+05:30)	83.8 MB	Standard
job-9592cc4f-5e1c-480a-b030-95da4db18f68/	Folder	-	-	-

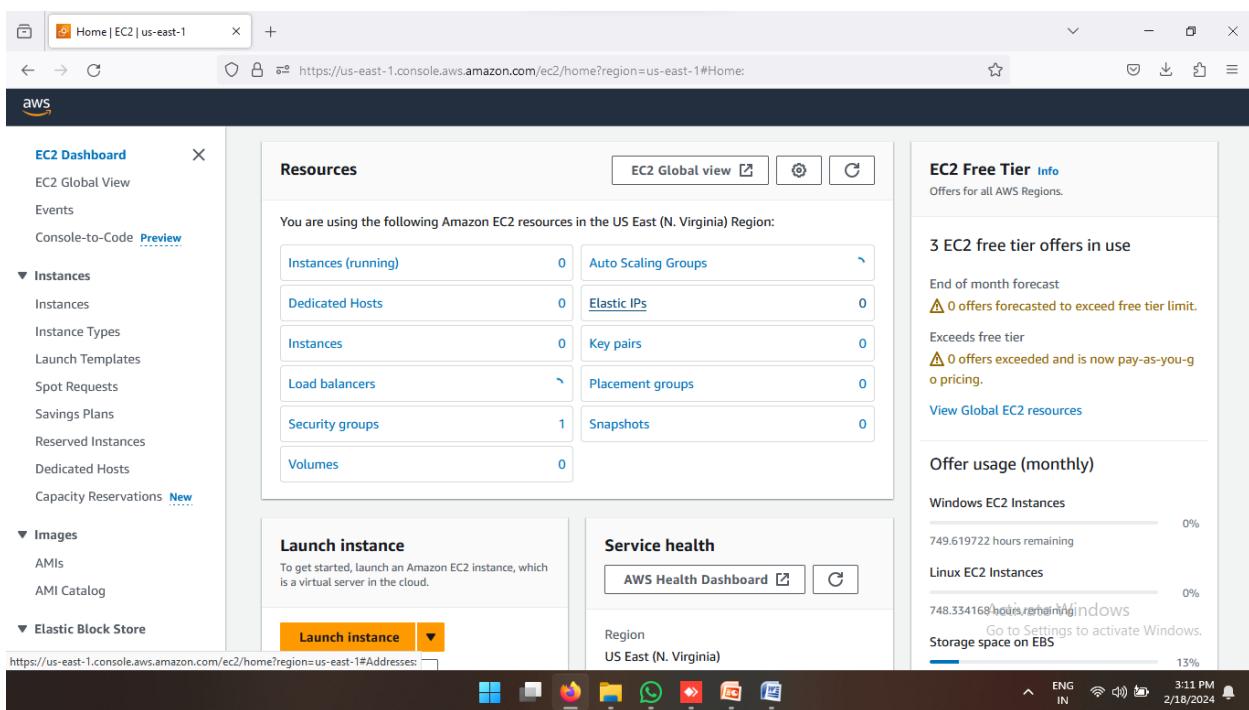
Below the table, there are buttons for 'Upload', 'Copy S3 URI', 'Copy URL', 'Download', 'Open', 'Delete', 'Actions', and 'Create folder'. A search bar at the top right says 'Find objects by prefix'.

3) Create ebs and attach volume to an instance and unmount the volume and attach to another instance?

- Go to AWS Console Home and search EC2 and Click on EC2



- Now we are in EC2 Dashboard
- Click on Instances



- Now Create One Server in any region

- Click on Launch Instances

The screenshot shows the AWS EC2 Instances page. The left sidebar is expanded, showing categories like EC2 Dashboard, EC2 Global View, Events, Console-to-Code, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images (AMIs, AMI Catalog), and Elastic Block Store. The main content area is titled 'Instances Info' and displays a search bar and a dropdown menu set to 'Any state'. It shows a message: 'No instances' and 'You do not have any instances in this region'. A prominent orange 'Launch instances' button is located at the bottom right of this section. The top navigation bar includes the AWS logo, services menu, search bar, and account information for N. Virginia.

- Enter Name and select operating system

The screenshot shows the 'Launch an instance' wizard, step 1: Set instance details. The left sidebar shows the EC2 navigation path: EC2 > Instances > Launch an instance. The main form has a section for 'Name and tags' where the name 'e.g. My Web Server' is entered. Below it is a section for 'Application and OS Images (Amazon Machine Image)' with a search bar. On the right, there's a 'Summary' panel with sections for Number of instances (set to 1), Software Image (AMI) (dropdown), Virtual server type (instance type) (dropdown), Firewall (security group) (dropdown), and Storage (volumes) (dropdown). A blue callout box highlights the 'Free tier: In your first year includes' message. At the bottom right of the summary panel is a large orange 'Launch instance' button. The top navigation bar is identical to the previous screenshot.

The screenshot shows the AWS Cloud console with the URL <https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances>. The page displays the 'Quick Start' section, which includes a search bar and a grid of AMI icons for Amazon Linux, macOS, Ubuntu, Windows, Red Hat, and SUSE. To the right, the 'Summary' section is expanded, showing the following configuration:

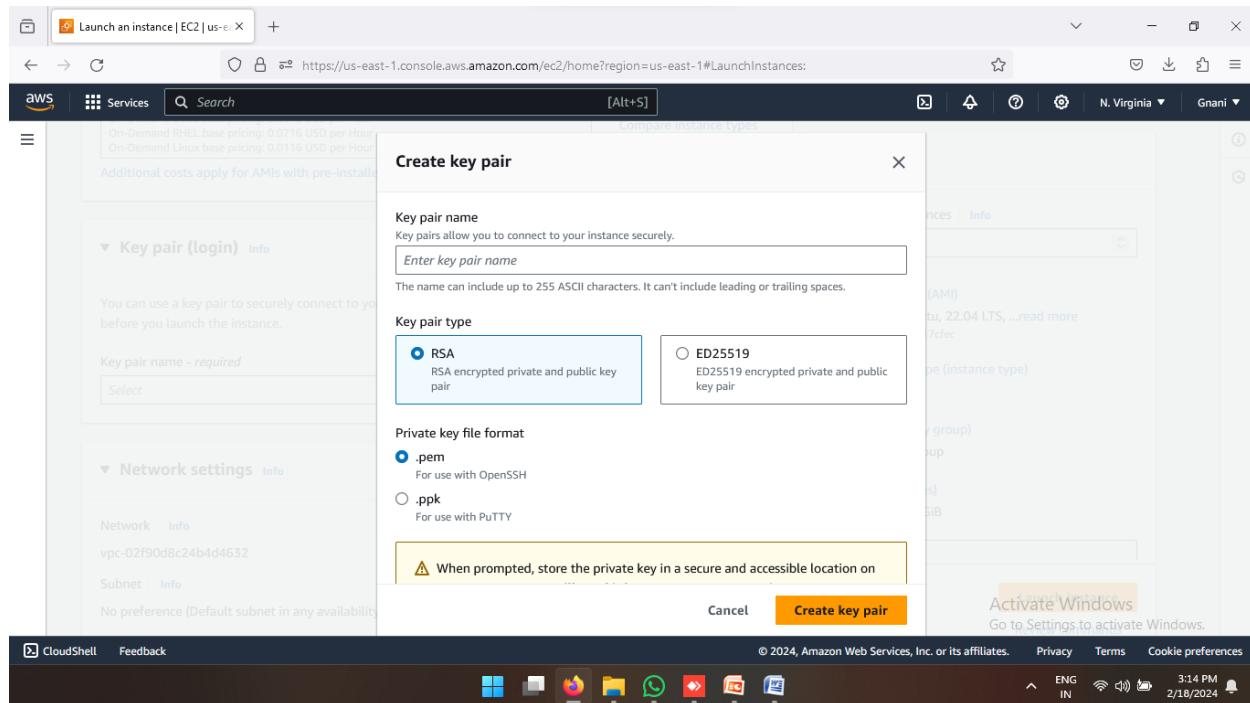
- Number of instances: 1
- Software Image (AMI): Amazon Linux 2023 AMI 2023.3.2... (ami-0e731c8a588258d0d)
- Virtual server type (instance type): t2.micro
- Firewall (security group): New security group
- Storage (volumes): 1 volume(s) - 8 GiB

At the bottom right, there is a prominent orange 'Launch instance' button.

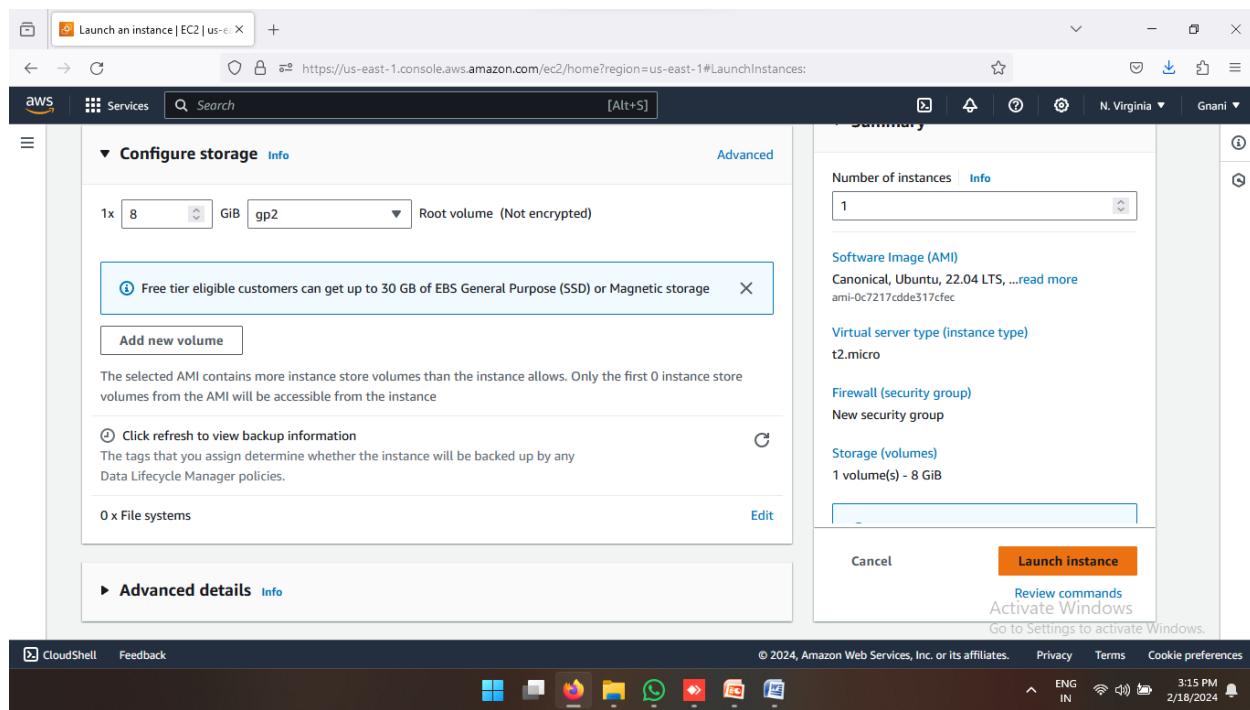
- Now Click a Create new key pair

The screenshot shows the same AWS Cloud console page, but the configuration has been updated. In the 'Key pair (login)' section, the 'Key pair name - required' dropdown is set to 'Select' and the 'Create new key pair' button is visible. In the 'Network settings' section, the 'Network' dropdown is set to 'vpc-02f90d8c24b4d4632'. The 'Subnet' dropdown is set to 'No preference (Default subnet in any availability zone)'. The rest of the configuration remains the same as the previous screenshot, including the summary and launch instance button.

- Enter a key name and click on create key pair



- Now Click on launch instance



The screenshot shows the AWS EC2 Instances Launch an instance page. At the top, there's a green success message: "Successfully initiated launch of instance (i-0793456c258c948b9)". Below it, a "Launch log" link is visible. A "Next Steps" section contains links to "Create billing and free tier usage alerts", "Connect to your instance", "Connect an RDS database", and "Create EBS snapshot policy". The "Connect to your instance" section includes a "Connect to instance" button and a "Learn more" link. The "Create EBS snapshot policy" section includes a "Create EBS snapshot policy" button, a "Activate Windows" link, and a "Go to Settings to activate Windows" link. The bottom of the screen shows the AWS navigation bar and a taskbar.

- One server (or) Instance Created and Click on instance id then connect

The screenshot shows the AWS EC2 Instances page. A green notification bar at the top says "Successfully terminated i-015e6b21bcb63831a". Below it, the "Instances (1/2)" section shows one instance named "assignment1" with the ID "i-0882e048b49830496", which is currently "Running". The instance type is "t2.micro" and it is in the "Initializing" state. The "Availability Zone" is "us-east-1d". The "Details" tab is selected, showing the instance summary with fields like "Instance ID", "Public IPv4 address", "Private IPv4 addresses", "IPv6 address", "Instance state", and "Public IPv4 DNS". The bottom of the screen shows the AWS navigation bar and a taskbar.

Instance details | EC2 | us-east-1 | WhatsApp

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceDetails:instanceId=i-0882e048b49830496

EC2 Services Search [Alt+S]

EC2 IAM

Notifications 0 0 2 0 0 0

EC2 Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations New AMIs

Successfully terminated i-015e6b21bcb53831a

EC2 > Instances > i-0882e048b49830496

Instance summary for i-0882e048b49830496 (assignment1) Info

Updated less than a minute ago

Instance ID i-0882e048b49830496 (assignment1)	Public IPv4 address 54.237.203.122 [open address]	Private IPv4 addresses 172.31.29.20
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-54-237-203-122.compute-1.amazonaws.com [open address]
Hostname type IP name: ip-172-31-29-20.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-29-20.ec2.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations.
Auto-assigned IP address 54.237.203.122 [Public IP]	VPC ID vpc-0c4bd5c812cd5bf84	

CloudShell Feedback Type here to search 24°C Haze ENG IN 10:20 AM 2/20/2024

Connect to instance | EC2 | us-east-1 | WhatsApp

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ConnectToInstance:instanceId=i-0882e048b49830496

EC2 Services Search [Alt+S]

New tab Ctrl+T
New window Ctrl+N
New Incognito window Ctrl+Shift+N

Lakshmi Lakshmi

Passwords and autofill History Downloads Bookmarks and lists Extensions Clear browsing data... Ctrl+Shift+Del

Zoom 90% Print... Search this page with Google... Translate... Find and edit Save and share

EC2 Instance Connect Session Manager SSH client EC2 serial console

Instance ID i-0882e048b49830496 (assignment1)

Connection Type

Connect using EC2 Instance Connect
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

Connect using EC2 Instance Connect Endpoint
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address 54.237.203.122

Username ubuntu

Note: In most cases, the default username, ubuntu, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel Connect

CloudShell Feedback Type here to search 24°C Haze ENG IN 10:21 AM 2/20/2024

- Now Connected server

```

Expanded Security Maintenance for Applications is not enabled.
0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-82-214:~$
```

i-0793456c258c948b9 (Assign-ec1)
PublicIPs: 3.93.82.50 PrivateIPs: 172.31.82.214

Activate Windows
Go to Settings to activate Windows.

- df -h this command check user size

```

ubuntu@ip-172-31-29-20:~$ sudo -i
root@ip-172-31-29-20:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root       7.6G  1.6G  6.0G  21% /
tmpfs          475M    0  475M   0% /dev/shm
tmpfs          190M  848K  190M   1% /run
tmpfs          5.0M    0  5.0M   0% /run/lock
/dev/xvda15     105M  6.1M  99M   6% /boot/efi
tmpfs          95M  4.0K  95M   1% /run/user/1000
root@ip-172-31-29-20:~#
```

i-0882e048b49830496 (assignment1)
PublicIPs: 54.237.203.122 PrivateIPs: 172.31.29.20

- Now go to ebs then volumes

Volumes (1) Info

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Create
-	vol-053652fc2d0f6785e	gp2	8 GiB	100	-	snap-091ad9e...	2024/02/20

Summary for all volumes in this Region

Snapshot summary

Recently backed up volumes / Total # volumes
0 / 1

Last updated on Tue, Feb 20, 2024, 10:22:51 AM (GMT+05:30)

Data Lifecycle Manager default policy for EBS Snapshots status
No default policy set up | Create policy

- Click on Create Volume

Volume settings

Volume type: General Purpose SSD (gp3)

Size (GiB): 20

IOPS: 3000

Throughput (MiB/s): 125

Availability Zone: us-east-1a

Snapshot ID: optional

Encryption: Amazon EBS encryption is an encryption solution for your EBS resources associated with your EC2 instances.

Tags - optional

No tags associated with the resource.

Snapshot summary

Click here to view backup information

- Enter the size whatever you want then select same availability zone of EC2 then create volume

Volume type [Info](#)
General Purpose SSD (gp3)

General Purpose SSD gp3 is now the default selection. gp3 provides up to 20% lower cost per GB than gp2. [Learn More](#)

Size (GiB) [Info](#)
5

IOPS [Info](#)
3000

Throughput (MiB/s) [Info](#)
125

Availability Zone [Info](#)
us-east-1a

Activate Windows
Go to Settings to activate Windows.

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Create volume | EC2 | us-east-1 X EC2 Instance Connect | us-east-1 X https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateVolume: [Alt+S]

Services Search [Alt+S]

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

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.

No tags associated with the resource.
[Add tag](#)
You can add 50 more tags.

Snapshot summary [Info](#)
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.

Cancel [Create volume](#) Activate Windows
Go to Settings to activate Windows.

- After Create a volume see the status of created volume it is available state is showing.
- Select that volume and attach volume to our first instance.
- After Attach volume that should be disable. And detach is enable.

The screenshot shows the AWS EC2 Volumes page in the us-east-1 region. A success message at the top indicates "Successfully created volume vol-0132d1ab4bb25c030." The main table displays two volumes:

	Throughput	Snapshot	Created	Availability Zone	Volume s
-	snap-091ad9e...	2024/02/18 15:15 GMT+5:...	us-east-1a	In-use	
125	-	2024/02/18 15:22 GMT+5:...	us-east-1a	Available	

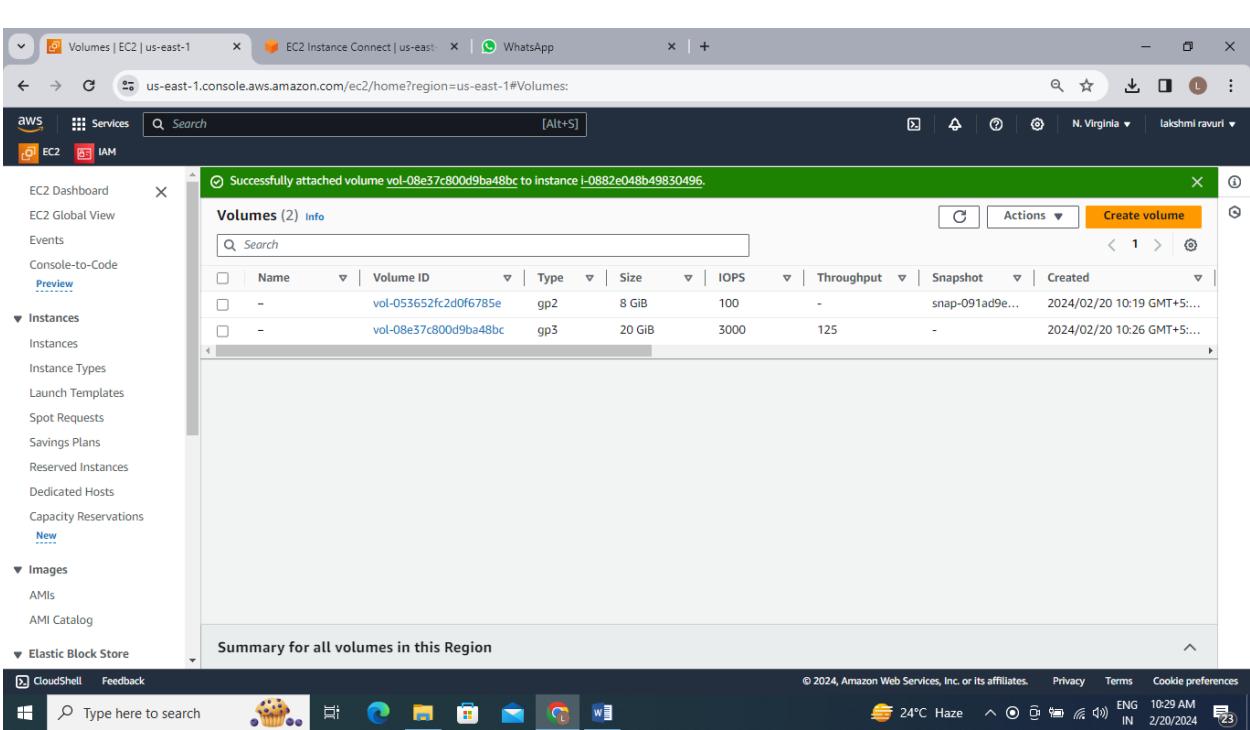
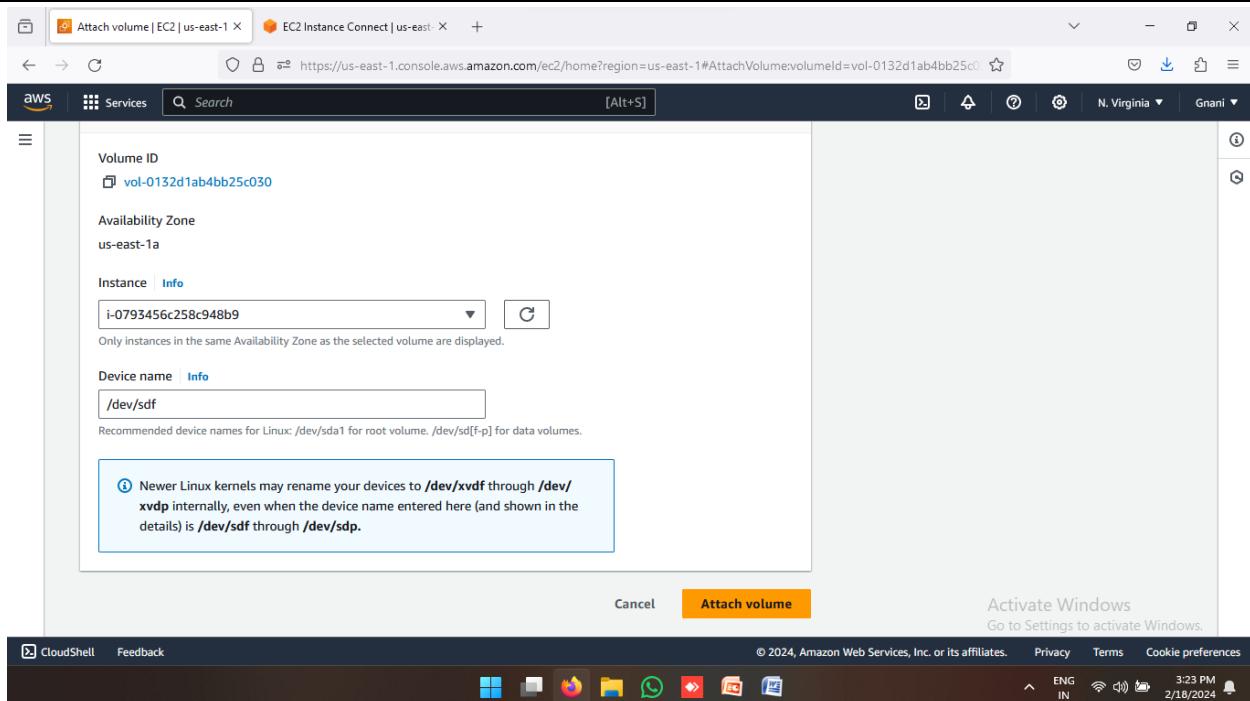
Below the table, the Volume ID is shown: **Volume ID: vol-0132d1ab4bb25c030**. The Details tab is selected, displaying the following information:

Volume ID	Size	Type
vol-0132d1ab4bb25c030	5 GiB	gp3

Other details shown include:

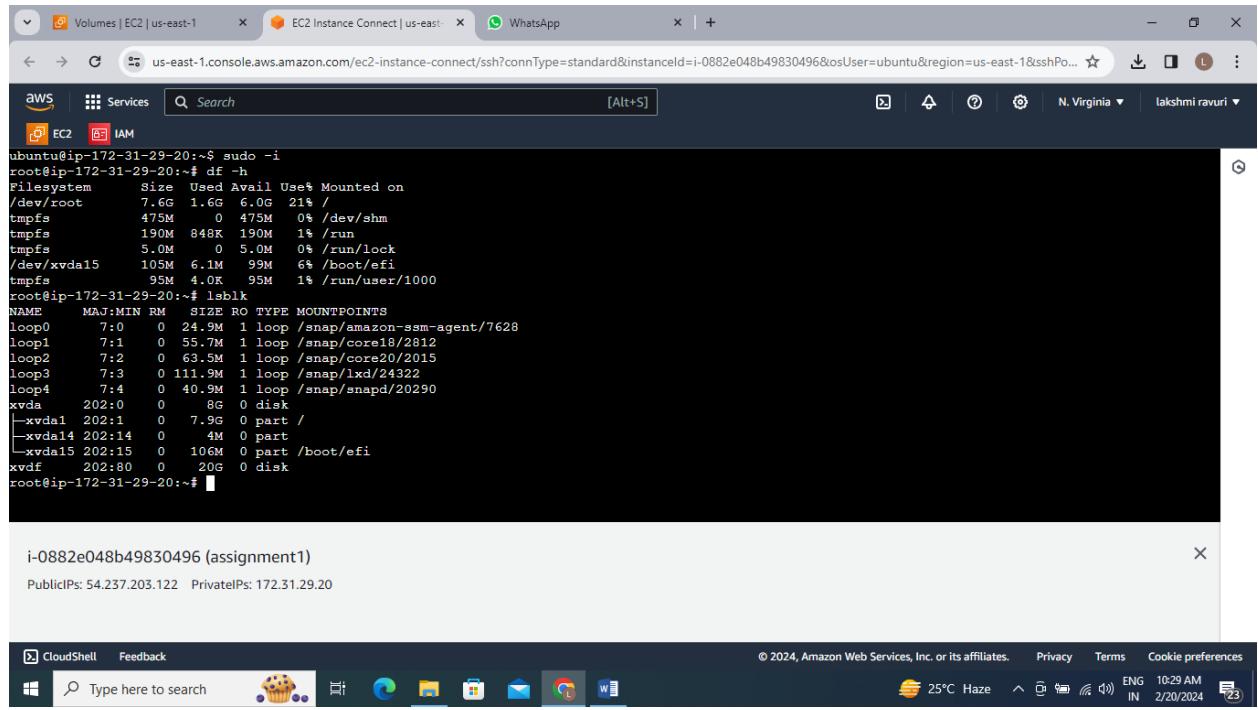
- AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. | Learn more
- Encryption: Not encrypted
- Volume state: Available
- IOPS: 3000
- KMS key ID
- KMS key alias

A context menu is open on the right side of the table, listing options such as Actions, Create volume, Modify volume, Create snapshot, Create snapshot lifecycle policy, Delete volume, Attach volume, Detach volume, Force detach volume, Manage auto-enabled I/O, Manage tags, and Fault injection. The "Available" volume is selected in the table.



- Now Go to EC2 Connected server

- Enter Command for volume is attached or not
- Command is “lsblk”



```
ubuntu@ip-172-31-29-20:~$ sudo -i
root@ip-172-31-29-20:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root     7.6G  6.0G  21% /
tmpfs        475M   475M  0% /dev/shm
tmpfs       190M  848K 190M  1% /run
tmpfs        5.0M   0  5.0M  0% /run/lock
/dev/xvda15   105M  6.1M  99M  6% /boot/efi
tmpfs        95M  4.0K  95M  1% /run/user/1000
root@ip-172-31-29-20:~# lsblk
NAME  MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0   7:0    0 24.9M  1 loop /snap/amazon-ssm-agent/7628
loop1   7:1    0 55.7M  1 loop /snap/core18/2812
loop2   7:2    0 63.5M  1 loop /snap/core20/2015
loop3   7:3    0 111.9M 1 loop /snap/lxd/24322
loop4   7:4    0 40.9M  1 loop /snap/snapd/20290
xvda   202:0   0   8G  0 disk
└─xvda1  202:1   0   7.9G 0 part /
  ├─xvda14 202:14  0   4M 0 part
  └─xvda15 202:15  0 106M 0 part /boot/efi
xvdf   202:80  0   20G 0 disk
root@ip-172-31-29-20:~#
```

i-0882e048b49830496 (assignment1)
PublicIPs: 54.237.203.122 PrivateIPs: 172.31.29.20

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Windows Type here to search 25°C Haze ENG 10:29 AM IN 2/20/2024 [23]

- First to check file system is there or not then create new File system in volume
- Command is **mkfs -t xfs /dev/xvdf**
- To Check file system created or not command is **file -s /dev/xvdf**
- Create directories and mount the volume to directories
Command is
mkdir -p vcube/batch
mount /dev/xvdf vcube/batch
cd vcube/batch
mkdir 124 145
vi file1
ls – see the list files and directories
cd
umount /dev/xvdf vcube/batch

A screenshot of an EC2 Instance Connect session. The terminal window shows the following command sequence:

```
root@ip-172-31-29-20:~# mkdir -p vcube/batch
root@ip-172-31-29-20:~# mount /dev/xvdf vcube/batch
root@ip-172-31-29-20:~# ls
snap vcube
root@ip-172-31-29-20:~# cd vcube/batch
root@ip-172-31-29-20:~/vcube/batch# mkdir 134 146
root@ip-172-31-29-20:~/vcube/batch# vi file1
root@ip-172-31-29-20:~/vcube/batch#
```

i-0882e048b49830496 (assignment1)

PublicIPs: 54.237.203.122 PrivateIPs: 172.31.29.20



A screenshot of an EC2 Instance Connect session. The terminal window shows the following text:

```
Good Morning all
How are yo
```

i-0793456c258c948b9 (Assign-ec1)

PublicIPs: 3.93.82.50 PrivateIPs: 172.31.82.214

Activate Windows
Go to Settings to activate Windows.



```
/dev/xvdः: SGI XFS filesystem data (blksz 4096, inosz 512, v2 dirs)
root@ip-172-31-82-214:~# mkdir -p vcube/batch
root@ip-172-31-82-214:~# mount /dev/xvdः vcube/batch
root@ip-172-31-82-214:~# ls
snap vcube
root@ip-172-31-82-214:~# cd vcube/batch
root@ip-172-31-82-214:~/vcube/batch# mkdir 124 145
root@ip-172-31-82-214:~/vcube/batch# vi file1
root@ip-172-31-82-214:~/vcube/batch# ls
124 145 file1
root@ip-172-31-82-214:~/vcube/batch# cd ..
root@ip-172-31-82-214:~# lsblk
NAME   MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0    7:0     0  24.9M  1 loop /snap/amazon-ssm-agent/7628
loop1    7:1     0  55.7M  1 loop /snap/core18/2812
loop2    7:2     0  63.5M  1 loop /snap/core20/2015
loop3    7:3     0 111.9M  1 loop /snap/lxd/24322
loop4    7:4     0  40.9M  1 loop /snap/snapd/20290
xvda   202:0     0     8G  0 disk
└─xvda1  202:1     0  7.9G  0 part /
└─xvda14 202:14    0  4M  0 part
└─xvda15 202:15    0 106M  0 part /boot/efi
xvdf   202:80    0  20G  0 disk /root/vcube/batch
root@ip-172-31-82-214:~# umount /dev/xvdः vcube/batch
```

i-0793456c258c948b9 (Assign-ec1)

Public IPs: 3.93.82.50 Private IPs: 172.31.82.214

```
loop4    7:4     0  40.9M  1 loop /snap/snapd/20290
xvda   202:0     0     8G  0 disk
└─xvda1  202:1     0  7.9G  0 part /
└─xvda14 202:14    0  4M  0 part
└─xvda15 202:15    0 106M  0 part /boot/efi
xvdf   202:80    0  20G  0 disk /root/vcube/batch
root@ip-172-31-29-20:~# umount /dev/xvdः vcube/batch
umount: /dev/xvdः: no mount point specified.
root@ip-172-31-29-20:~# umount /dev/xvdः vcube/batch
umount: /dev/xvdः: not mounted.
umount: vcube/batch: not mounted.
root@ip-172-31-29-20:~# lsblk
NAME   MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0    7:0     0  24.9M  1 loop /snap/amazon-ssm-agent/7628
loop1    7:1     0  55.7M  1 loop /snap/core18/2812
loop2    7:2     0  63.5M  1 loop /snap/core20/2015
loop3    7:3     0 111.9M  1 loop /snap/lxd/24322
loop4    7:4     0  40.9M  1 loop /snap/snapd/20290
xvda   202:0     0     8G  0 disk
└─xvda1  202:1     0  7.9G  0 part /
└─xvda14 202:14    0  4M  0 part
└─xvda15 202:15    0 106M  0 part /boot/efi
xvdf   202:80    0  20G  0 disk
root@ip-172-31-29-20:~#
```

i-0882e048b49830496 (assignment1)

Public IPs: 54.237.203.122 Private IPs: 172.31.29.20

- Now go to Volumes and detach the volume to instance

Volumes | EC2 | us-east-1 EC2 Instance Connect | us-east-1 WhatsApp

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Volumes:

AWS Services Search [Alt+S]

EC2 IAM

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Successfully attached volume vol-08e37c800d9ba48bc to instance i-0882e048b49830496.

Volumes (1/2) Info

Name Volume ID Type Size IOPS Throughput

- vol-053652fc2d0f6785e gp2 8 GiB 100 -

- vol-08e37c800d9ba48bc gp3 20 GiB 3000 125

Actions Create volume

Modify volume

Create snapshot

Create snapshot lifecycle policy

Delete volume

Attach volume

Detach volume

Force detach volume

Manage auto-enabled I/O

Manage tags

Fault injection

volume status Okay

Throughput 125

Volume ID: vol-08e37c800d9ba48bc

Details Status checks Monitoring Tags

Volume ID: vol-08e37c800d9ba48bc

Size: 20 GiB

Type: gp3

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. [Learn more]

Volume state: In-use

IOPS: 3000

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Volumes | EC2 | us-east-1 EC2 Instance Connect | us-east-1 +

https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Volumes:

AWS Services Search [Alt+S]

EC2 Dashboard

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Instances

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High winds soon ENG IN 10:44 AM 2/20/2024

Successfully attached volume vol-0132d1ab4bb25c030 to instance i-0793456c258c948b5.

Volumes (1/2) Info

Name Volume ID Type Size IOPS Throughput Snapshot Created

- vol-0793456c258c948b5 gp2 8 GiB 100 -

- vol-0132d1ab4bb25c030 gp3 5 GiB 3000 125 snap-091ad9e... 2024/02

Detach vol-0132d1ab4bb25c030?

After you detach a volume, you might still be charged for volume storage. If you no longer need the volume, delete it to stop incurring charges.

Are you sure that you want to detach volume vol-0132d1ab4bb25c030?

Cancel Detach

Volume ID: vol-0132d1ab4bb25c030

Volume ID: vol-0132d1ab4bb25c030

Size: 5 GiB

Type: gp3

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. [Learn more]

Volume state: In-use

IOPS: 3000

Encryption: None

KMS key ID: None

KMS key alias: None

Activate Windows Go to Settings to activate Windows.

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The screenshot shows the AWS CloudShell interface. The main window displays a success message: "Successfully detached volume." Below this, there is a table titled "Volumes (2) Info" showing two entries:

Snapshot	Created	Availability Zone	Volume state	Alarm status	Attached resources
ap-091ad9e...	2024/02/20 10:19 GMT+5:...	us-east-1d	In-use	No alarms	+ i-0882e048b49830496 (as...)
	2024/02/20 10:26 GMT+5:...	us-east-1d	Available	No alarms	+ -

Below the table, there is a summary section titled "Summary for all volumes in this Region" with a "Snapshot summary" table:

Recently backed up volumes / Total # volumes	Data Lifecycle Manager default policy for EBS Snapshots status
0 / 1	No default policy set up Create policy

The left sidebar lists various AWS services: Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations (New), Images (AMIs, AMI Catalog), Elastic Block Store (Volumes, Snapshots, Lifecycle Manager), and Network & Security (Security Groups, Elastic IPs). The "CloudShell" tab is selected at the bottom.

- Now go to EC2 Instance and create one more instance in same availability zone

The screenshot shows the AWS EC2 Home page for the US East (N. Virginia) Region. The left sidebar includes links for EC2 Dashboard, EC2 Global View, Events, Console-to-Code, Instances (with sub-links for Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations), Images (AMIs, AMI Catalog), and Elastic Block Store. The main content area displays a summary of resources: Instances (running) 0, Auto Scaling Groups 0, Dedicated Hosts 0, Elastic IPs 0, Instances 0, Key pairs 0, Load balancers 0, Placement groups 0, Security groups 1, Snapshots 0, and Volumes 0. Below this are sections for Launch instance (with a button to Launch instance) and Service health (AWS Health Dashboard). A sidebar on the right titled 'EC2 Free Tier Info' shows '3 EC2 free tier offers in use' and details about end-of-month forecasts and offers. The bottom of the screen shows the Windows taskbar with various pinned icons.

The screenshot shows the AWS EC2 Instances page for the US East (N. Virginia) Region. The left sidebar is identical to the previous screenshot. The main content shows a notification: 'Successfully terminated i-015e6b21bcb63831a'. Below it, the 'Instances (1/2)' section lists one instance: 'assignment1' (Instance ID: i-0882e048b49830496, State: Running, Type: t2.micro, Status check: Initializing, Availability Zone: us-east-1d). An 'Actions' dropdown menu is open, showing options like 'Launch instances'. The bottom of the screen shows the Windows taskbar.

- After Creating Instance go to instance id and connect the instance

Successfully terminated i-015e6b21bcb63831a

Instances (1/3) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
assignment1	i-0882e048b49830496	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1d
assignment2	i-06d8b382ea463ee28	Pending	t2.micro	-	View alarms +	us-east-1d

Instance: i-015e6b21bcb63831a (pan)

Details | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

Instance summary Info

Instance ID i-015e6b21bcb63831a (pan)	Public IPv4 address -	Private IPv4 addresses -
IPv6 address -	Instance state Terminated	Public IPv4 DNS -

- Now go to Volumes and attach the already created volume attach to second instance

Instance details | EC2 | us-east-1 X EC2 Instance Connect | us-east-1 X EC2 Instance Connect | us-east-1 X +

Launch Templates

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Snapshots

Lifecycle Manager

Network & Security

Security Groups

Elastic IPs

Placement Groups

Key Pairs

Details | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

Instance details Info

IPv6 address -	Instance state Running	Public IPv4 DNS ec2-184-73-144-123.compute-1.amazonaws.com
Hostname type IP name: ip-172-31-80-22.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-80-22.ec2.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations.
Auto-assigned IP address 184.73.144.123 [Public IP]	VPC ID vpc-02f90d8c24b4d4632	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-00c76679479f7b1c9	Learn more
IMDSv2 Required		

Activate Windows
Go to Settings to activate Windows.

Volumes (1/3) Info

Name	Volume ID	Type	Size	IOPS	Thru
-	vol-053652fc2d0f6785e	gp2	8 GiB	100	-
<input checked="" type="checkbox"/>	vol-08e37c800d9ba48bc	gp3	20 GiB	3000	125
-	vol-021666fa194b3fd0c	gp2	8 GiB	100	-

Volume ID: vol-08e37c800d9ba48bc

Details Status checks Monitoring Tags

Volume ID vol-08e37c800d9ba48bc	Size 20 GiB	Type gp3	Volume status Okay
AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more	Volume state Available	IOPS 3000	Throughput 125

Attach volume | EC2 | us-east-1 X EC2 Instance Connect | us-east- X EC2 Instance Connect | us-east- X +

aws Services Search [Alt+S]

Volume ID
vol-0132d1ab4bb25c030

Availability Zone
us-east-1a

Instance Info
i-0e29b950dfbfad723

Device name Info
/dev/sdf

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

Cancel Attach volume

After Attach volume to check the file system is there or not

Then see the data in volume Command is

- **File -s /dev/xvdf**
- **Mkdir /data**
- **Mount /dev/xvdf /data**
- **Cd /data**

● Ls

Instance details | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | +

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connType=standard&instanceId=i-06d8b382ea463ee28&cosUser=ubuntu&sshPort=22#/
[Alt+S] Search N. Virginia lakshmi ravuri

aws Services IAM

```
root@ip-172-31-21-5:~# lsblk
NAME   MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0    7:0    0  24.9M  1 loop /snap/amazon-ssm-agent/7628
loop1    7:1    0  55.7M  1 loop /snap/core18/2812
loop2    7:2    0  63.5M  1 loop /snap/core20/2015
loop3    7:3    0 111.9M  1 loop /snap/lxd/24322
loop4    7:4    0  40.9M  1 loop /snap/snapd/20290
xvda   202:0    0     8G  0 disk
└─xvda1  202:1    0    7.9G  0 part /
  ├─xvda14 202:14   0    4M  0 part
  └─xvda15 202:15   0   10G  0 part /boot/efi
xvdf   202:80   0    20G  0 disk
root@ip-172-31-21-5:~# file -s /dev/xvdf
/dev/xvdf: 8G XFS filesystem data (blksize 4096, inosz 512, v2 dirs)
root@ip-172-31-21-5:~# mkdir /data
root@ip-172-31-21-5:~# mount /dev/xvdf /data
root@ip-172-31-21-5:~# cd /data
root@ip-172-31-21-5:/data# ls
134 146 file1
root@ip-172-31-21-5:/data# cat file1
Hello mogood morning all
root@ip-172-31-21-5:/data#
```

i-06d8b382ea463ee28 (assignment2)

PublicIPs: 50.16.146.80 PrivateIPs: 172.31.21.5

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Volumes | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | EC2 Instance Connect | us-east-1 | +

https://us-east-1.console.aws.amazon.com/ec2-instance-connect/connType=standard&instanceId=i-0e29b950dfbaf723 Open a new tab (Ctrl+T) N. Virginia Gnanu

aws Services Search [Alt+S]

```
root@ip-172-31-80-22:~# mkdir /data
root@ip-172-31-80-22:~# mount /dev/xvdf /data
root@ip-172-31-80-22:~# cd /data
root@ip-172-31-80-22:/data# ls
124 145 file1
root@ip-172-31-80-22:/data# cat file1
Good Morning all
How are you
root@ip-172-31-80-22:/data#
```

i-0e29b950dfbaf723 (Assign-ec2)

PublicIPs: 184.73.144.123 PrivateIPs: 172.31.80.22

Activate Windows Go to Settings to activate Windows.

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R.Lakshmi

ravurilakshmi2315@gmail.com

Batch No : 120 – 5PM

Date : 18-02-2024.

THANK YOU