

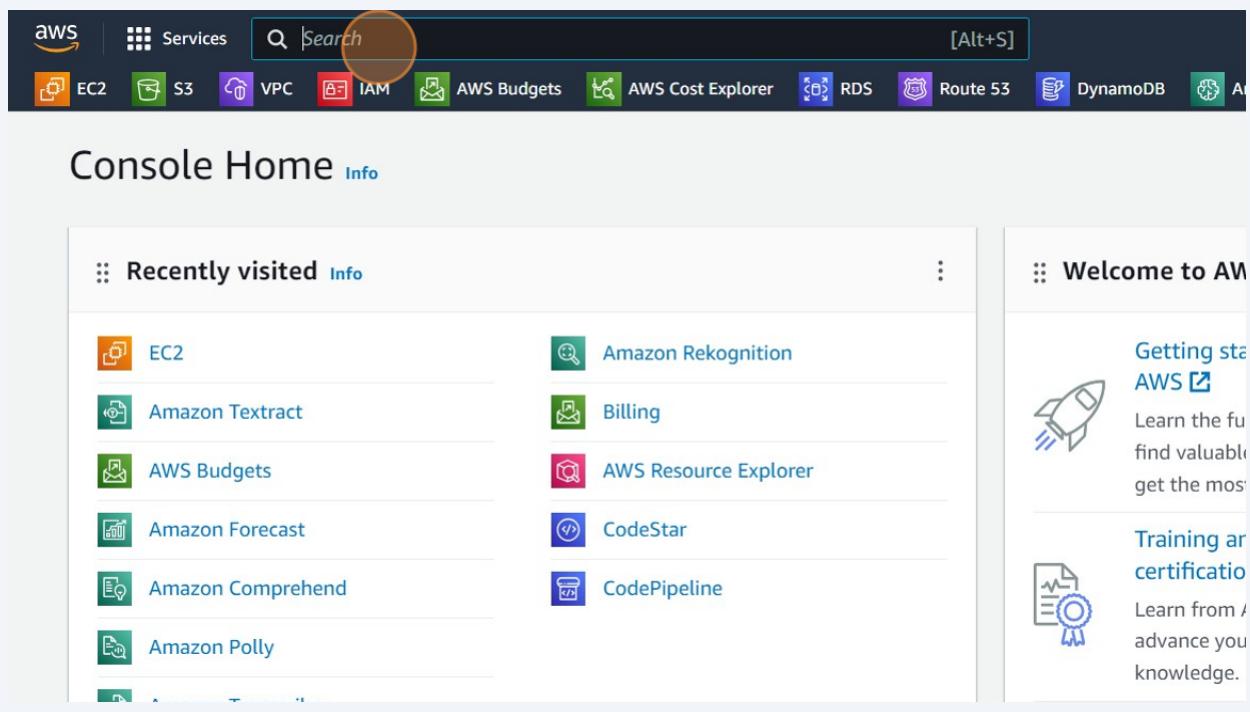
Create EBS Volume

This guide provides step-by-step instructions on how to manage EBS volumes in AWS. It covers creating, attaching, and deleting volumes, as well as how to identify if the volume has the "Delete on termination" option enabled. If you need to manage EBS volumes in AWS, this guide will help you navigate the process efficiently.

This guide was created by Nijat Hajiyev

- 1 Navigate to aws.amazon.com

- 2 Click the "Search" field.



- 3 Type "EC2"

4 Click "EC2"

The screenshot shows the AWS search interface. In the top navigation bar, there is a search bar with the text "EC2". Below the search bar, a sidebar titled "Recently viewed" lists several services: EC2, Amazon Te, AWS Budgets, Amazon Fo, Amazon Co, and Amazon Po. To the right of the sidebar, the search results for "EC2" are displayed under the heading "Services (13)". A callout bubble highlights the "EC2" service card, which features an orange icon, the text "EC2 ★ Virtual Servers in the Cloud", and a link to "Dashboard". Other cards visible include "Top features" (with links to "Launch templates", "Instances", "Spot Instance requests", and "Savings plans"), "EC2 Image Builder" (described as a managed service to automate build, customize, and deploy OS images), and "Recycle Bin" (for protecting resources from accidental deletion).

5 Click "Instances"

The screenshot shows the EC2 Dashboard. On the left, a sidebar menu is open, showing various options like "EC2 Global View", "Events", and "Instances". The "Instances" option is highlighted with a yellow circle. The main content area displays a summary of Amazon EC2 resources in the Europe (Frankfurt) Region. It includes a table with the following data:

Resource Type	Count	Action
Instances (running)	1	Auto Scaling Groups
Dedicated Hosts	0	Elastic IPs
Instances	1	Key pairs
Load balancers	0	Placement groups
Security groups	8	Snapshots
Volumes	1	

6 Click this checkbox.

The screenshot shows the AWS EC2 Instances page. On the left, there's a sidebar with various EC2-related options like EC2 Dashboard, Global View, Events, Instances, Instances Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, and Capacity Reservations. The 'Instances' section is expanded, and 'Instances' is selected. In the main content area, the title 'Instances (1)' is shown above a search bar. Below the search bar is a table with one row. The table has columns for Name, Instance ID, Instance state, and Instance type. The first row contains 'DemoInstance', 'i-0e3be6d2df85f1bd1', 'Running', and 't2.micro'. To the left of 'DemoInstance' is a checkbox, which is highlighted with a red circle. Below the table, a section titled 'Select an instance' is visible.

7 Click "Networking"

The screenshot shows the AWS EC2 Instance Details page for the instance 'i-0e3be6d2df85f1bd1' (DemoInstance). On the left, there's a sidebar with various EC2-related options. The 'Instances' section is expanded, and 'Instances' is selected. In the main content area, the title 'Instance: i-0e3be6d2df85f1bd1 (DemoInstance)' is shown above a navigation bar with tabs: Details, Security, Networking, Storage, Status checks, Monitoring, and More. The 'Networking' tab is highlighted with a red circle. Below the tabs, there's a section titled 'Instance summary' with an 'Info' link. It displays the Instance ID (i-0e3be6d2df85f1bd1 (DemoInstance)), Public IPv4 address (3.67.6.4), and Instance state (Running).

8 Check "Availability zone"

The screenshot shows the AWS CloudWatch Metrics console. On the left, there's a sidebar with navigation links: Events, Instances, Images, Elastic Block Store, and CloudShell. Under Instances, 'Instances' is selected. The main area displays a table of metrics. One row is highlighted with a blue background, showing 'DemolInstance' with an Instance ID of 'i-0e3be6d2df85f1bd1', an 'Instance state' of 'Running', and an 'Instance type' of 't2.micro'. Below the table, a detailed view for 'DemolInstance' is shown. It includes sections for 'Availability zone' (set to 'eu-central-1a'), 'Use RBN as guest OS hostname' (disabled), and 'Network Interfaces (1)'. A search bar at the bottom says 'Filter network interfaces'.

9 Click "Volumes"

This screenshot is similar to the previous one, showing the AWS CloudWatch Metrics console. The sidebar now has 'Elastic Block Store' expanded, and 'Volumes' is highlighted with a red circle. The main area shows the same table of metrics and detailed view for 'DemolInstance'. The 'Availability zone' section still shows 'eu-central-1a'. The search bar at the bottom says 'Filter network interfaces'.

- 10 Click this checkbox. (This EBS volume was created with the instance)

The screenshot shows the AWS Management Console with the search bar at the top. The navigation bar includes services like EC2, S3, VPC, IAM, AWS Budgets, AWS Cost Explorer, RDS, Route 53, DynamoDB, and others. On the left, a sidebar lists options such as Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images (AMIs, AMI Catalog), and Elastic Block Store (Volumes, Snapshots, Lifecycle Manager). The main content area displays a table titled "Volumes (1)" with one item: Name - vol-0f34b8094357df863, Volume ID - vol-0f34b8094357df863, Type - gp2, and Size - 8 GiB. A checkbox is located to the left of the Name column header, and another one is highlighted with a red circle next to the first volume entry.

- 11 Check "Availability Zone"

EBS volume is AZ level and attached to EC2 instance

The screenshot shows the AWS Management Console with the search bar at the top. The main content area displays a table for the selected EBS volume:

Volume ID	Type	Size	IOPS	Throughput	Snapshot
vol-0f34b8094357df863	gp2	8 GiB	100	-	snap-05a8fa3887339409c

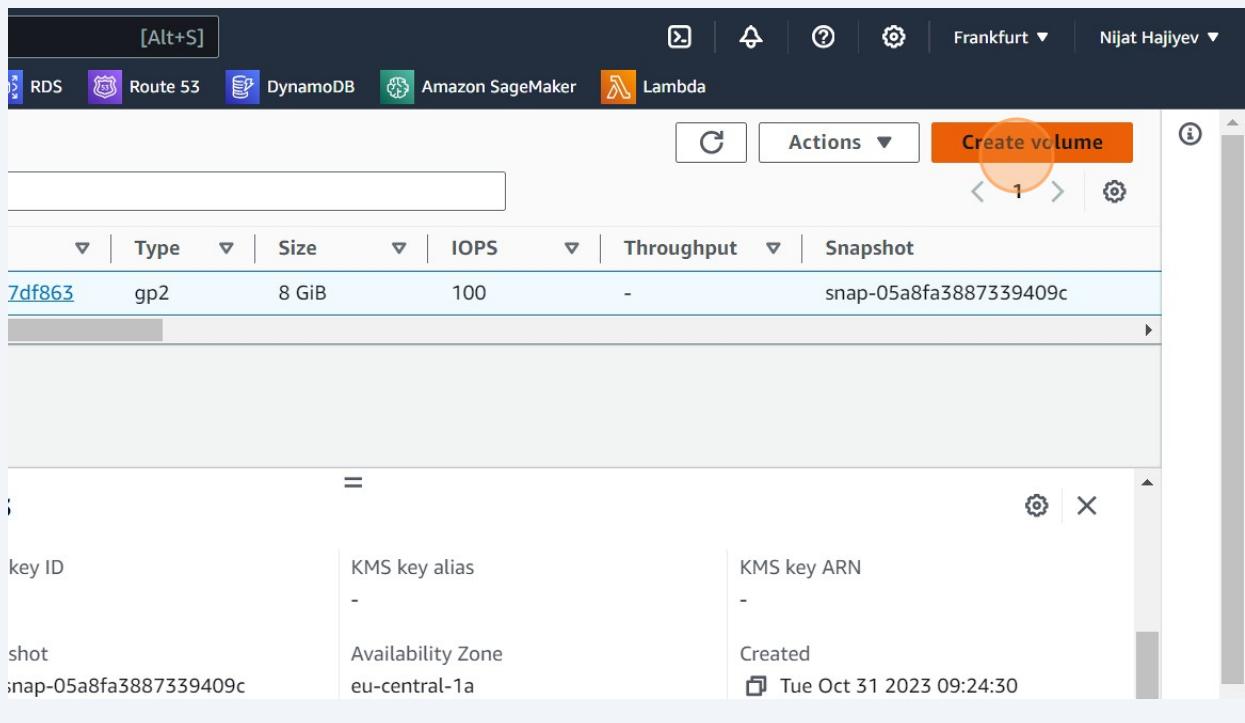
Below the table, a detailed view of the volume is shown with the following fields:

KMS key ID	KMS key alias	KMS key ARN
-	-	-
Snapshot	Availability Zone	Created
snap-05a8fa3887339409c	eu-central-1a	Tue Oct 31 2023 09:24:30 GMT+0100 (Central European Time)
Attached Instances	Outposts ARN	
i-0e3be6d2df85f1bd1 (DemoInstance): /dev/xvda (attached)	-	

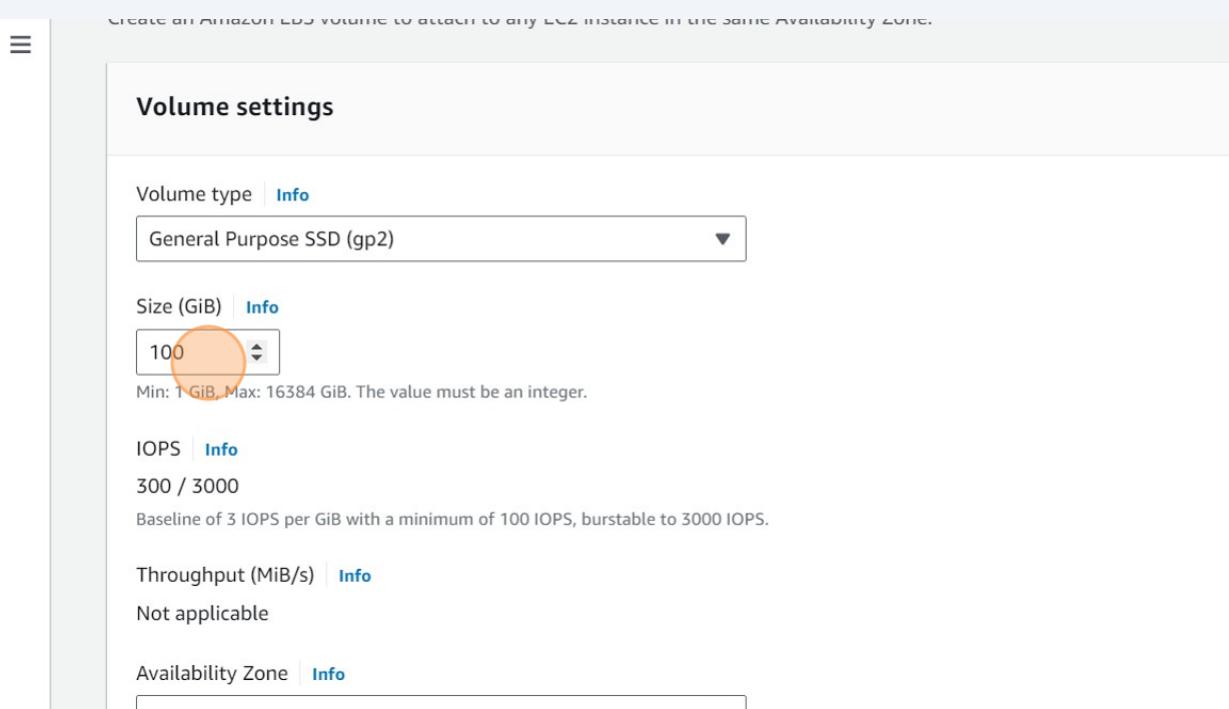
At the bottom of the page, there are links for "Privacy" and "Terms".

Create new volume

12 Click "Create volume"



13 Click the "Size (GiB)" field.



14 Type "2"

15 Select "eu-central-1a" (same AZ as instance has)

100 / 3000
Baseline of 3 IOPS per GiB with a minimum of 100 IOPS, burstable to 3000 IOPS.

Throughput (MiB/s) | [Info](#)
Not applicable

Availability Zone | [Info](#)

eu-central-1a

eu-central-1a

eu-central-1b

eu-central-1c

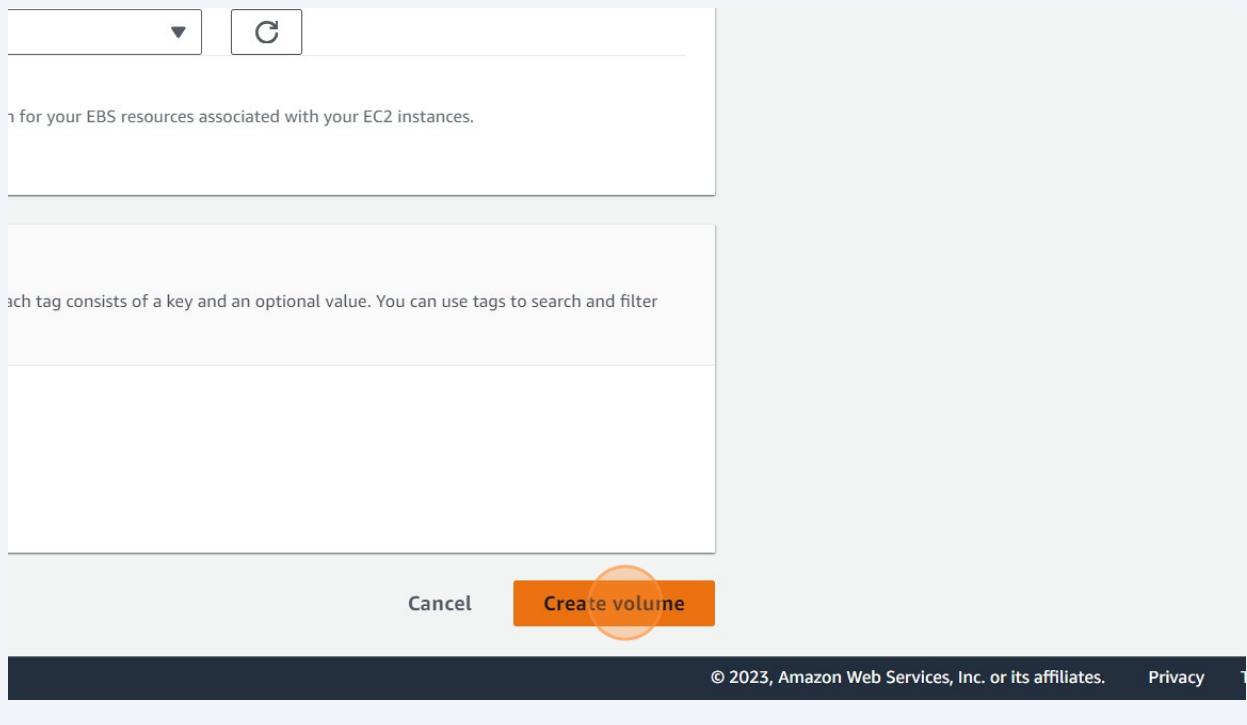
Encrypt this volume

associated with your EC2 instances.

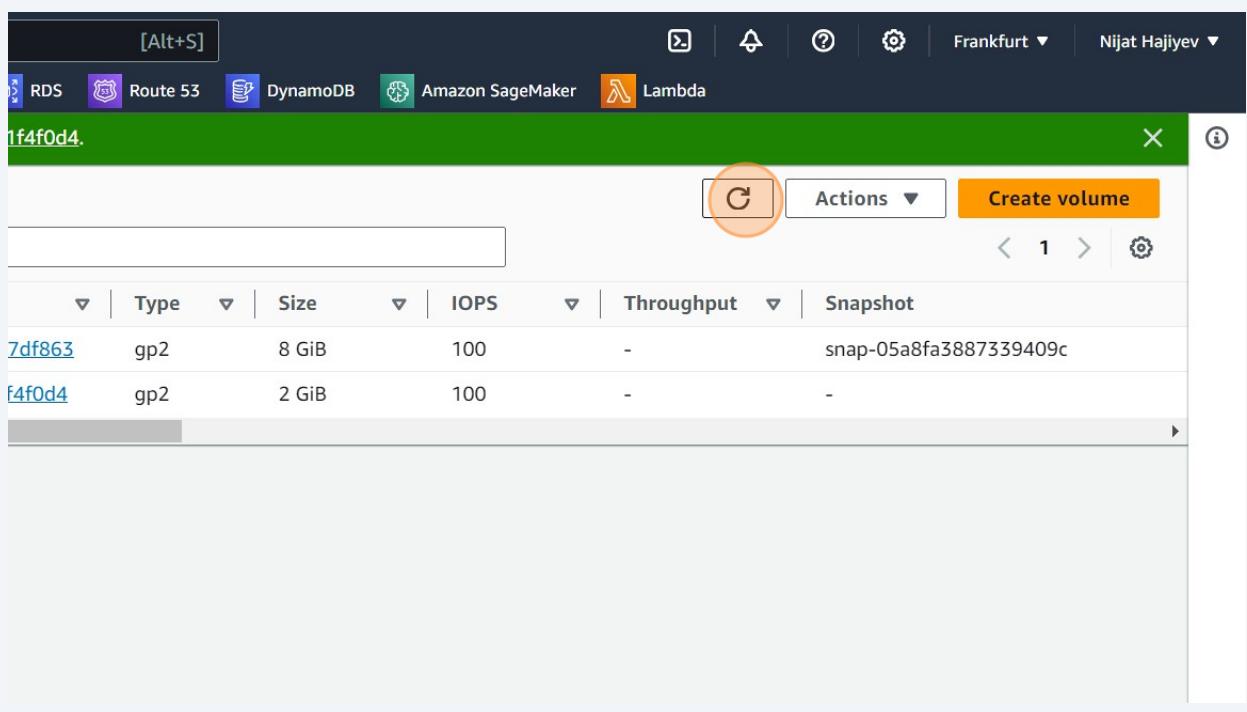
Tags - optional [Info](#)

[CloudShell](#) [Feedback](#)

16 Click "Create volume"



17 Click this button.



18 Click this checkbox.

The screenshot shows the AWS EC2 Dashboard with the 'Volumes' section selected. A success message at the top says 'Successfully created volume vol-0badad2fb1f4f0d4.' The 'Volumes' table lists two entries:

Name	Volume ID	Type	Size
-	vol-0f34b8094357df863	gp2	8 GiB
-	vol-0badad2fb1f4f0d4	gp2	2 GiB

The second row, corresponding to the volume just created, has its checkbox checked and is circled in orange.

19 Click "Volume state"

The screenshot shows the AWS EC2 'Volume ID: vol-0badad2fb1f4f0d4' details page. The 'Details' tab is selected. In the 'Volume' section, the 'Volume state' field is highlighted with an orange circle around the 'Available' status.

Volume ID	Size	Type
vol-0badad2fb1f4f0d4	2 GiB	gp2

Below the table, it says 'AWS Compute Optimizer finding' and 'Opt-in to AWS Compute Optimizer for recommendations. | Learn more'.

Attach volume to instance

20 Click this checkbox.

The screenshot shows the AWS EC2 Volumes page. On the left, there is a sidebar with various EC2-related links. The main area displays a table titled "Volumes (2) Info" with two rows. The first row has a checkbox column with an orange circle highlighting the first checkbox. The second row also has a checkbox column. The table columns are: Name, Volume ID, Type, and Size. The data in the table is as follows:

	Name	Volume ID	Type	Size
<input type="checkbox"/>	-	vol-0f34b8094357df863	gp2	8 GiB
<input type="checkbox"/>	-	vol-0397207347ac0ecd6	gp2	2 GiB

21 Click "Actions"

The screenshot shows the AWS Lambda Volume Actions page. At the top, there is a navigation bar with links for RDS, Route 53, DynamoDB, Amazon SageMaker, and Lambda. Below the navigation bar is a toolbar with a refresh icon, an "Actions" button (which is highlighted with an orange circle), and a "Create volume" button. The main area displays a table with two rows of volume information. The table columns are: Type, Size, IOPS, Throughput, and Snapshot. The data in the table is as follows:

Type	Size	IOPS	Throughput	Snapshot
gp2	8 GiB	100	-	snap-05a8fa3887339409c
gp2	2 GiB	100	-	-

At the bottom of the page, there is a "Tags" section and a summary table with the following data:

2 GiB	Type gp2	Volume status Okay
-------	-------------	-----------------------

22 Click "Attach volume"

The screenshot shows the AWS CloudFormation console. In the top navigation bar, there are links for RDS, Route 53, DynamoDB, Amazon SageMaker, and Lambda. On the right, it shows the location as Frankfurt and the user Nijat Hajiyev. Below the navigation bar, there is a table listing two volumes. The first volume has ID `7df863`, type gp2, size 8 GiB, IOPS 100, and throughput -. The second volume has ID `ac0ecd6`, type gp2, size 2 GiB, IOPS 100, and throughput -. To the right of the table is a sidebar with the title "Actions". A dropdown menu is open, showing options: Create volume (highlighted in orange), Modify volume, Create snapshot, Create snapshot lifecycle policy, Delete volume, Attach volume (highlighted in orange), Detach volume, Force detach volume, Manage auto-enabled I/O, Manage tags, and Fault injection.

23 Check "Availability Zone"

The screenshot shows the AWS CloudFormation console. At the top, there is a navigation bar with links for EC2, S3, VPC, IAM, AWS Budgets, AWS Cost Explorer, RDS, Route 53, DynamoDB, and CloudWatch Metrics. Below the navigation bar, a message says "Attach a volume to an instance to use it as you would a regular physical hard disk drive." On the left, there is a sidebar with a three-line icon. The main area is titled "Basic details". It shows a "Volume ID" field containing `vol-0397207347ac0ecd6`. Below it, an "Availability Zone" field is set to `eu-central-1a`. There is a dropdown menu for "Instance" and a "Device name" input field. A note at the bottom states: "Only instances in the same Availability Zone as the selected volume are displayed."

24 Click this button.

Basic details

Volume ID
 vol-0397207347ac0ecd6

Availability Zone
eu-central-1a

Instance | [Info](#)

▾ C

Only instances in the same Availability Zone as the selected volume are displayed.

Device name | [Info](#)

[Cancel](#) [Attach volume](#)



25 Select instance

Volume ID
 vol-0397207347ac0ecd6

Availability Zone
eu-central-1a

Instance | [Info](#)

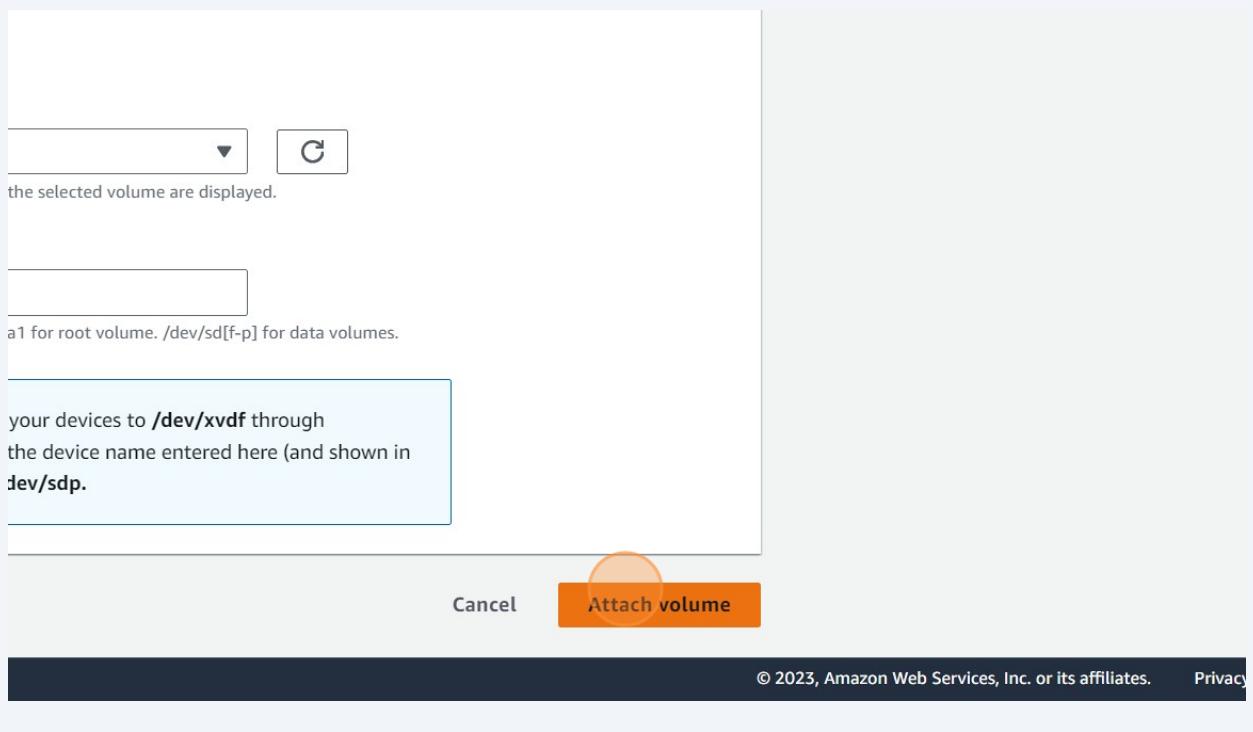
▾ C

i-0e3be6d2df85f1bd1
(DemoInstance) (running)

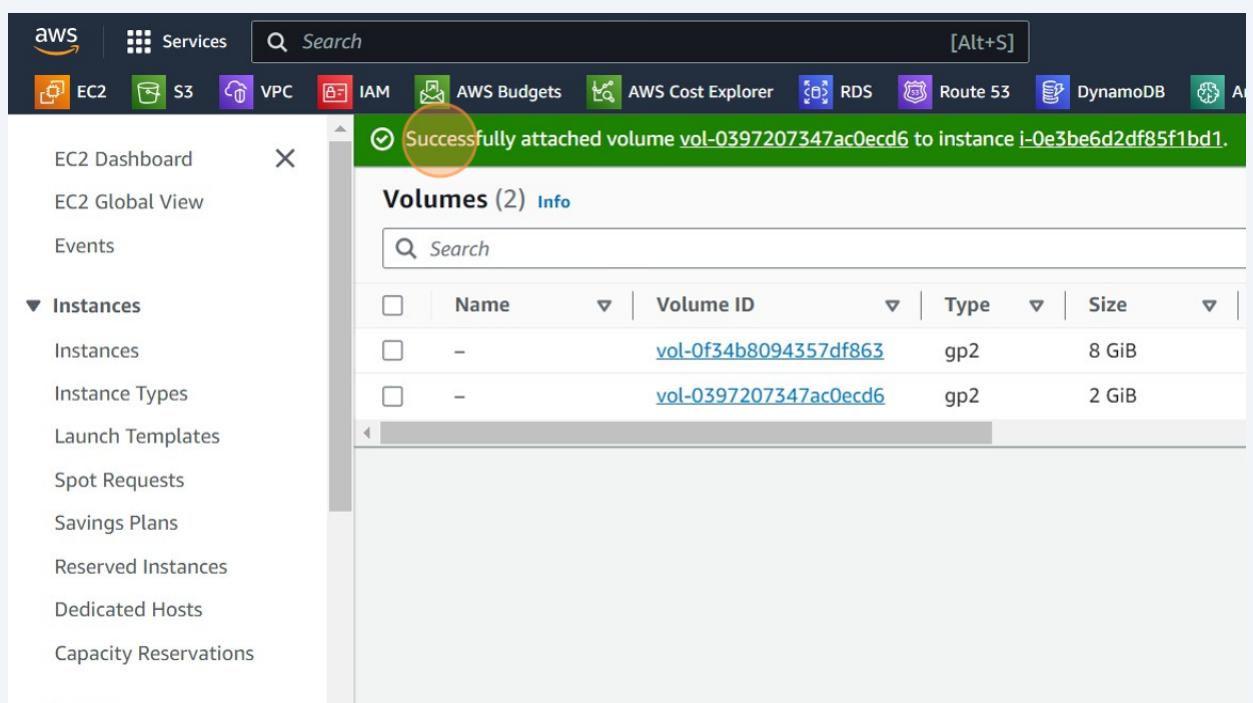
[Cancel](#) [Attach volume](#)

 CloudShell [Feedback](#)

26 Click "Attach volume"



27 Check notification



28 Refresh

A screenshot of the AWS CloudWatch Metrics console. At the top, there's a navigation bar with links for RDS, Route 53, DynamoDB, Amazon SageMaker, and Lambda. The Lambda icon is highlighted. On the right of the navigation bar, it shows the location as Frankfurt and the user as Nijat Hajiyev. Below the navigation bar, a green banner displays the message "7ac0ecd6 to instance i-0e3be6d2df85f1bd1." The main area is a table titled "Actions" with a "Create volume" button. The table has columns for Type, Size, IOPS, Throughput, and Snapshot. It lists two volumes: one gp2 type volume of 8 GiB with 100 IOPS and no throughput, and another gp2 type volume of 2 GiB with 100 IOPS and no throughput. A snapshot named "snap-05a8fa3887339409c" is associated with the 8 GiB volume. The entire screenshot is enclosed in a light gray border.

29 Check attached instance

"i-0e3be6d2df85f1bd1 (DemoInstance): /dev/sdf (attached)"

A screenshot of the AWS CloudWatch Metrics console. At the top, there's a navigation bar with links for AWS Budgets, AWS Cost Explorer, RDS, Route 53, DynamoDB, Amazon SageMaker, and Lambda. The Lambda icon is highlighted. Below the navigation bar, a green banner displays the message "Successfully attached volume vol-0397207347ac0ecd6 to instance i-0e3be6d2df85f1bd1." The main area is a table titled "Volumes (2) Info". The table has columns for Zone, Volume state, Alarm status, Attached Instances, Volume state, and Encryption. There are two rows, both in Zone 1a and In-use state. The first row has "No alarms" under Alarm status and "i-0e3be6d2df85f1bd1 (De..." under Attached Instances. The second row also has "No alarms" under Alarm status and "i-0e3be6d2df85f1bd1 (De..." under Attached Instances. Both rows have "Okay" under Volume state and "Not encry..." under Encryption. The entire screenshot is enclosed in a light gray border.

30 Check "Volume state" - In-use

The screenshot shows the AWS CloudWatch Metrics console. At the top, there is a search bar labeled "Search". Below it is a table with columns: "Region", "Volume state", "Alarm status", "Attached Instances", and "Volume state". There are two rows of data:

Region	Volume state	Alarm status	Attached Instances	Volume state
I-1a	✓ In-use	No alarms	+ i-0e3be6d2df85f1bd1 (De...)	✓ Okay
I-1a	✓ In-use	No alarms	+ i-0e3be6d2df85f1bd1 (De...)	✓ Okay

Below the table, a specific volume is selected, showing its details. The Volume ID is vol-0397207347ac0ecd6. The "Details" tab is selected, displaying the following information:

Volume ID	Size	Type
vol-0397207347ac0ecd6	2 GiB	gp2
AWS Compute Optimizer finding	Volume state	IOPS
(i) Opt-in to AWS Compute Optimizer for recommendations. Learn more ↗	✓ In-use	100
Encryption	KMS key ID	KMS key alias
Not encrypted		

The "Volume state" row is highlighted with a red circle. At the bottom right of the screen, there is a copyright notice: © 2023, Amazon Web Services, Inc.

Delete on termination

31

Check one has "8 GiB" size and another one "2 GiB"

"8 GiB" was created with instance with the condition "Delete on termination" active

The screenshot shows the AWS CloudWatch Metrics console. At the top, there are navigation links: WS Budgets, AWS Cost Explorer, RDS, Route 53, DynamoDB, Amazon SageMaker, and Lambda. Below the navigation bar, there is a search bar containing the text 'ch'. To the right of the search bar are 'Actions' and a refresh icon. The main area displays a table with two rows of metrics. The columns are: Name, Volume ID, Type, Size, IOPS, Throughput, and Snapshot. The first row has a 'Name' column value of 'vol-0f34b8094357df863', a 'Volume ID' of 'vol-0f34b8094357df863', a 'Type' of 'gp2', a 'Size' of '8 GiB', an 'IOPS' of '100', a 'Throughput' of '-', and a 'Snapshot' of 'snap-05'. The second row has a 'Name' column value of 'vol-0397207347ac0ecd6', a 'Volume ID' of 'vol-0397207347ac0ecd6', a 'Type' of 'gp2', a 'Size' of '2 GiB', an 'IOPS' of '100', a 'Throughput' of '-', and a 'Snapshot' of '-'. The 'Size' column for both rows is highlighted with an orange circle.

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
vol-0f34b8094357df863	gp2	8 GiB	100	-	snap-05	
vol-0397207347ac0ecd6	gp2	2 GiB	100	-	-	

32

Click "Instances"

The screenshot shows the AWS EC2 Dashboard. At the top, there is a navigation bar with icons for Services, EC2, S3, VPC, IAM, AWS Budgets, AWS Cost Explorer, RDS, Route 53, DynamoDB, and Amazon SageMaker. A search bar is also present. On the left side, there is a sidebar with the following options: EC2 Dashboard, EC2 Global View, Events, Instances (with 'Instances' highlighted by an orange circle), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, and Capacity Reservations. The main content area is titled 'Volumes (2) Info' and shows a table with two rows of volumes. The columns are: Name, Volume ID, Type, and Size. The first row has a 'Name' column value of 'vol-0f34b8094357df863', a 'Volume ID' of 'vol-0f34b8094357df863', a 'Type' of 'gp2', and a 'Size' of '8 GiB'. The second row has a 'Name' column value of 'vol-0397207347ac0ecd6', a 'Volume ID' of 'vol-0397207347ac0ecd6', a 'Type' of 'gp2', and a 'Size' of '2 GiB'. Below the table, there is a message: 'Select a volume above'.

Name	Volume ID	Type	Size
-	vol-0f34b8094357df863	gp2	8 GiB
-	vol-0397207347ac0ecd6	gp2	2 GiB

33 Click this checkbox.

The screenshot shows the AWS EC2 Instances page. On the left, there's a sidebar with various EC2-related options like Instances Types, Launch Templates, and Spot Requests. The main area displays a table with one row for 'Demoinstance'. The first column contains a checkbox, which is highlighted with an orange circle. The table columns are labeled: Name, Instance ID, Instance state, and Instance type. The instance details are: Name - Demoinstance, Instance ID - i-0e3be6d2df85f1bd1, Instance state - Running, and Instance type - t2.micro.

34 Click "Storage"

The screenshot shows the AWS EC2 Instance Details page for 'Demoinstance'. At the top, there are several filter checkboxes, some of which are checked. Below the filters, the instance summary is displayed with its ID and state. The navigation tabs at the top of the instance details page are: Details (highlighted), Security, Networking, Storage (highlighted with an orange circle), Status checks, Monitoring, and Tags.

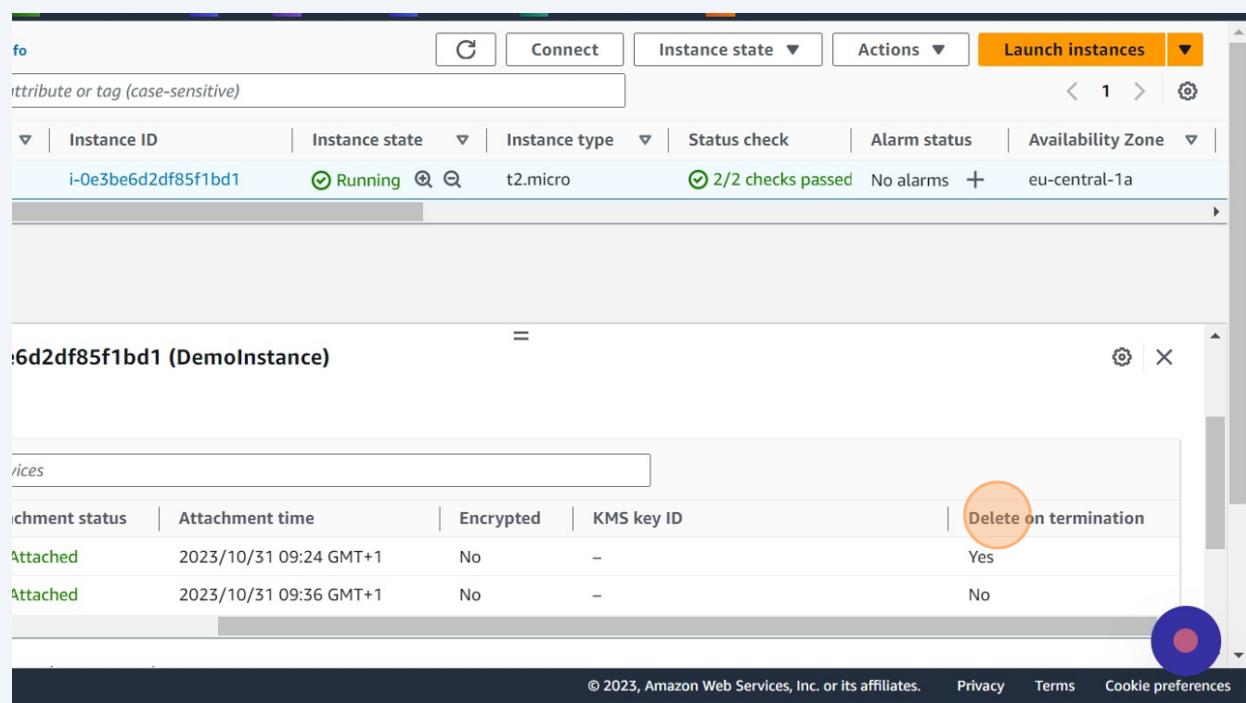
35 Check volumes

The screenshot shows the AWS CloudWatch Metrics interface. A search bar at the top contains the text "AmazonEC2". Below the search bar is a table with columns: Metric Name, Metric namespace, Unit, and Value. One row in the table is highlighted in blue and shows the values "CPU Utilization", "AWS/CloudWatch Metrics", "Count", and "100". On the left side, there is a navigation pane with sections like Events, Instances, Images, and Elastic Block Store. Under Instances, the "Instances" section is expanded, showing options like Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, and Capacity Reservations. Under Images, the "AMIs" section is expanded, showing options like AMI Catalog. Under Elastic Block Store, the "CloudShell" and "Feedback" buttons are visible.



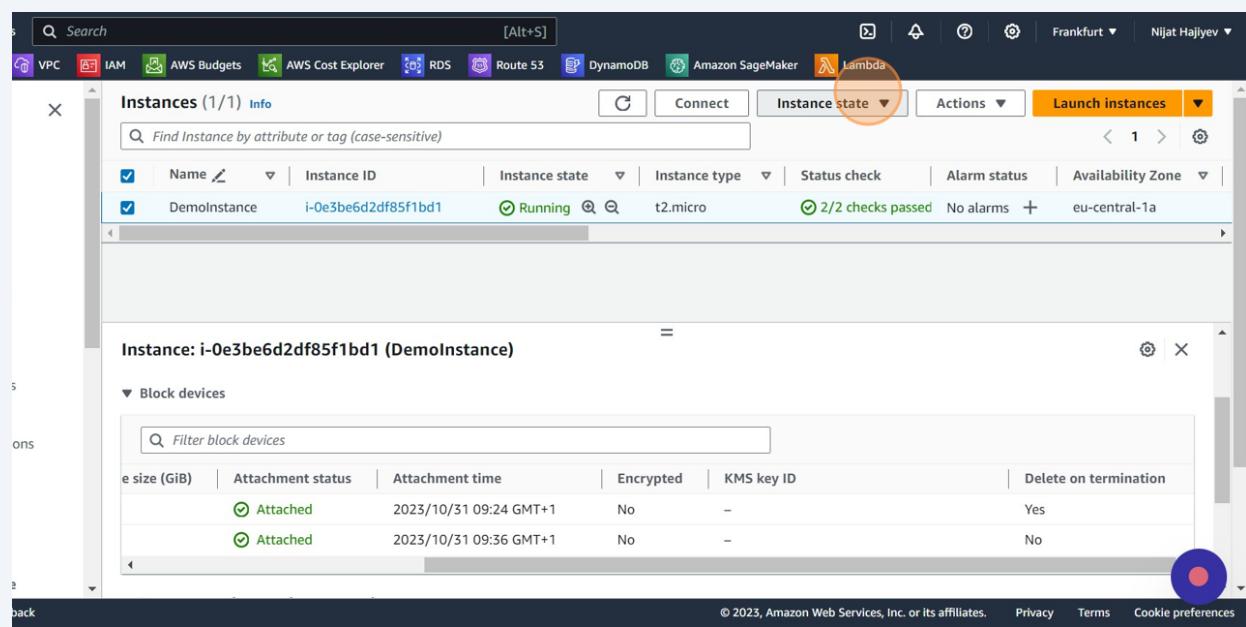
After terminating instance, "8 GiB" volume will be terminated because it has choice of "Delete on termination" - Yes

36 Check "Delete on termination"



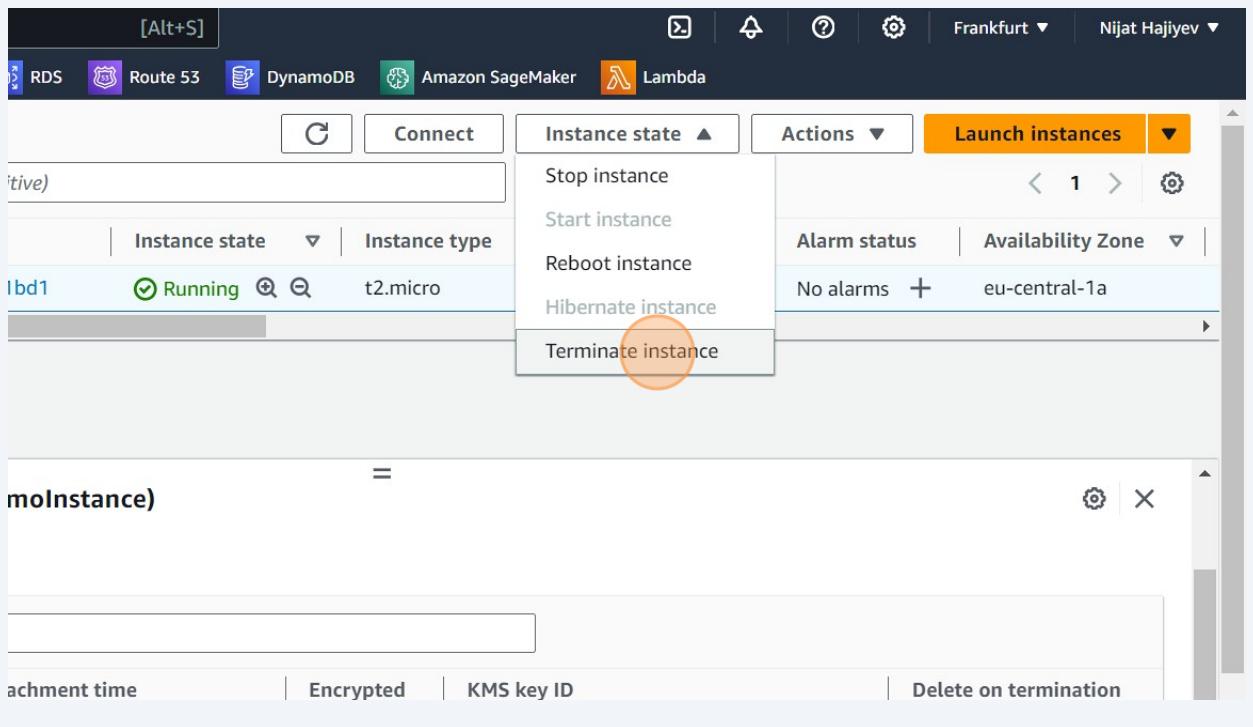
The screenshot shows the AWS Lambda console. At the top, there's a search bar and several navigation links like VPC, IAM, AWS Budgets, AWS Cost Explorer, RDS, Route 53, DynamoDB, Amazon SageMaker, and Lambda. The Lambda link is highlighted with a blue circle. Below the navigation, there's a table with columns: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, and Availability Zone. A single row is selected, showing 'DemoInstance' with 'i-0e3be6d2df85f1bd1' as the Instance ID, 'Running' as the Instance state, 't2.micro' as the Instance type, '2/2 checks passed' as the Status check, 'No alarms' as the Alarm status, and 'eu-central-1a' as the Availability Zone. The 'Delete on termination' checkbox in the configuration section is highlighted with an orange circle.

37 Click "Instance state"

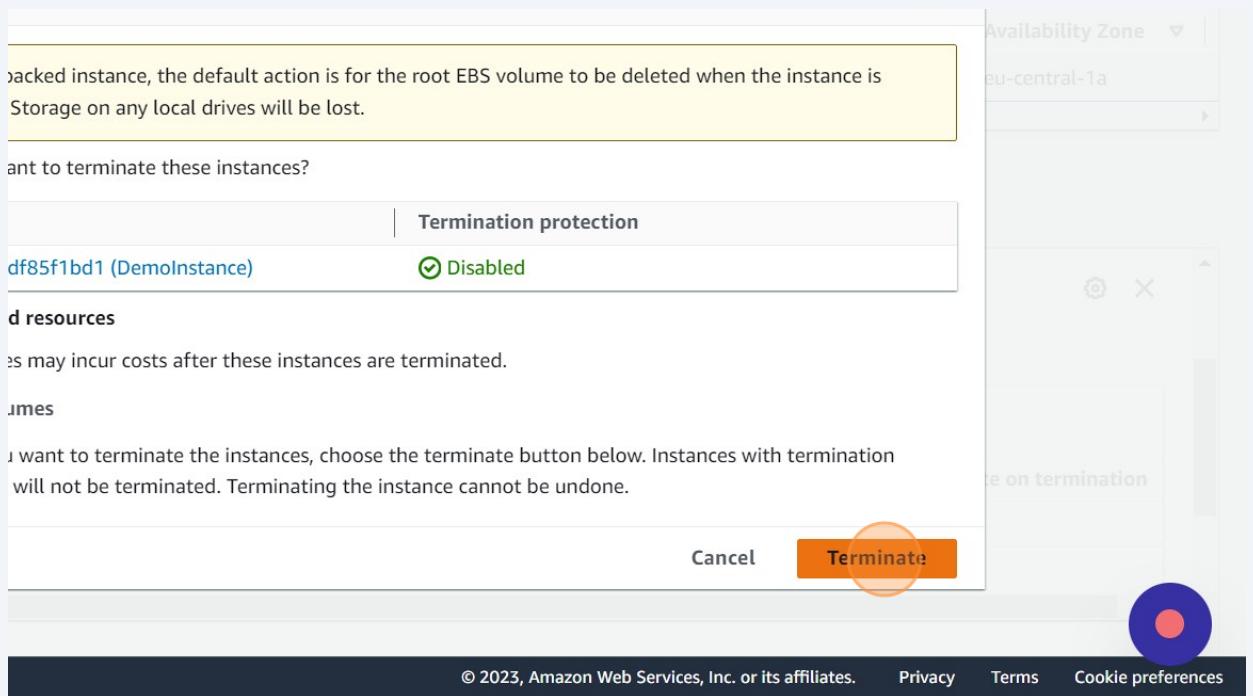


This screenshot is similar to the previous one, showing the AWS Lambda console for the 'DemoInstance' function. The 'Delete on termination' checkbox is no longer highlighted. Instead, the 'Instance state' dropdown button at the top of the configuration section is highlighted with an orange circle. The rest of the interface and data are identical to the previous screenshot.

38 Click "Terminate instance"



39 Click "Terminate"



40 Click here.

The screenshot shows the AWS CloudWatch Metrics console. A search bar at the top contains the query "describe placement volumes". Below the search bar, a message states "The volume 'vol-0f34b8094357df863' does not exist." A red banner below the message says "describe the following volumes :". The main results table has one item, labeled "1/1) Info". The table includes columns for Instance ID, Instance state, Instance type, Status check, and Alarm status. The instance listed is "i-0e3be6d2df85f1bd1" with a terminated state, t2.micro type, and 2/2 checks passed. The status check column shows a green checkmark icon. The alarm status column shows "No alarms".

41 Click "Successfully terminated i-0e3be6d2df85f1bd1"

The screenshot shows the AWS EC2 Instances page. A green banner at the top says "Successfully terminated i-0e3be6d2df85f1bd1". The main table shows one instance, "Instances (1/1)", with the name "Demoinstance" and the ID "i-0e3be6d2df85f1bd1". The instance state is "Terminated". The table includes columns for Name, Instance ID, Instance state, and Instance type. The instance type is t2.micro. The status check column shows a green checkmark icon. The alarm status column shows "No alarms".



One volume will be deleted.

42

Click "Volumes"

The screenshot shows the AWS EC2 Instances page. At the top, there is a green banner indicating "Successfully terminated i-0e3be6d2df85f1bd1". Below the banner, the "Instances (1/1)" section displays a single instance named "DemolInstance" with the ID "i-0e3be6d2df85f1bd1", which is marked as "Terminated". The "Name" column is checked. To the right of the instance details are buttons for "Edit", "Delete", and "Reboot". Below the instances section, the "Instance: i-0e3be6d2df85f1bd1 (DemolInstance)" details are shown, including the "Block devices" section which states "No block devices attached to this instance". On the left sidebar, under the "Elastic Block Store" category, the "Volumes" link is highlighted with an orange circle. Other links in the sidebar include "Dedicated Hosts", "Capacity Reservations", "Images", "AMIs", "AMI Catalog", "Schemas", "Snapshots", "Lifecycle Manager", "Network & Security", "Security Groups", "Elastic IPs", "Placement Groups", and "Key Pairs".

43 Click this button.

The screenshot shows the AWS Lambda console interface. At the top, there are navigation links for RDS, Route 53, DynamoDB, Amazon SageMaker, and Lambda. On the far right, it shows the location as Frankfurt and the user Nijat Hajiyev. Below the header is a search bar and a 'Create volume' button, which is highlighted with a large orange circle. The main area displays a table of volumes:

	Type	Size	IOPS	Throughput	Snapshot
7df863	gp2	8 GiB	100	-	snap-05a8fa3887339409c
lc0ecd6	gp2	2 GiB	100	-	-

44 Only "2 GiB" left

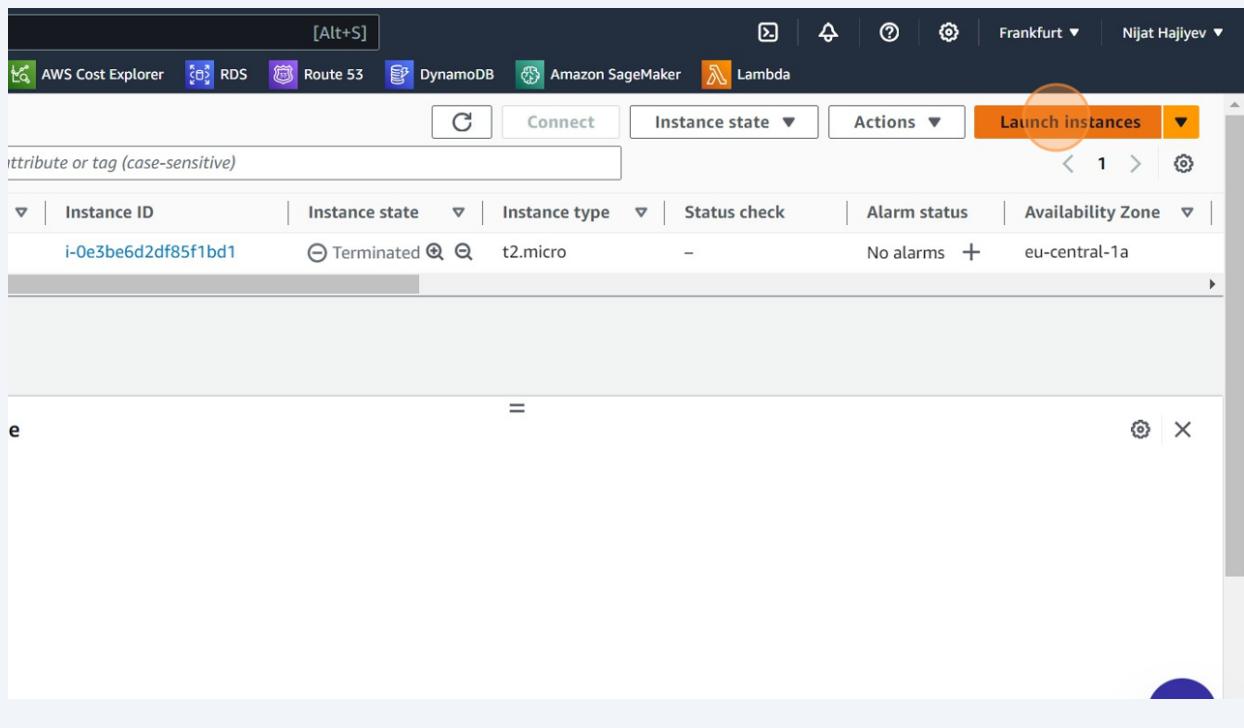
The screenshot shows the AWS Lambda console interface. At the top, there are navigation links for Budgets, AWS Cost Explorer, RDS, Route 53, DynamoDB, Amazon SageMaker, and Lambda. On the far right, it shows the location as Frankfurt and the user Nijat Hajiyev. Below the header is a search bar and an 'Actions' button, which is highlighted with a large orange circle. The main area displays a table of volumes:

	Volume ID	Type	Size	IOPS	Throughput	Snapshot
vol-0397207347ac0ecd6	gp2	2 GiB	100	-	-	-

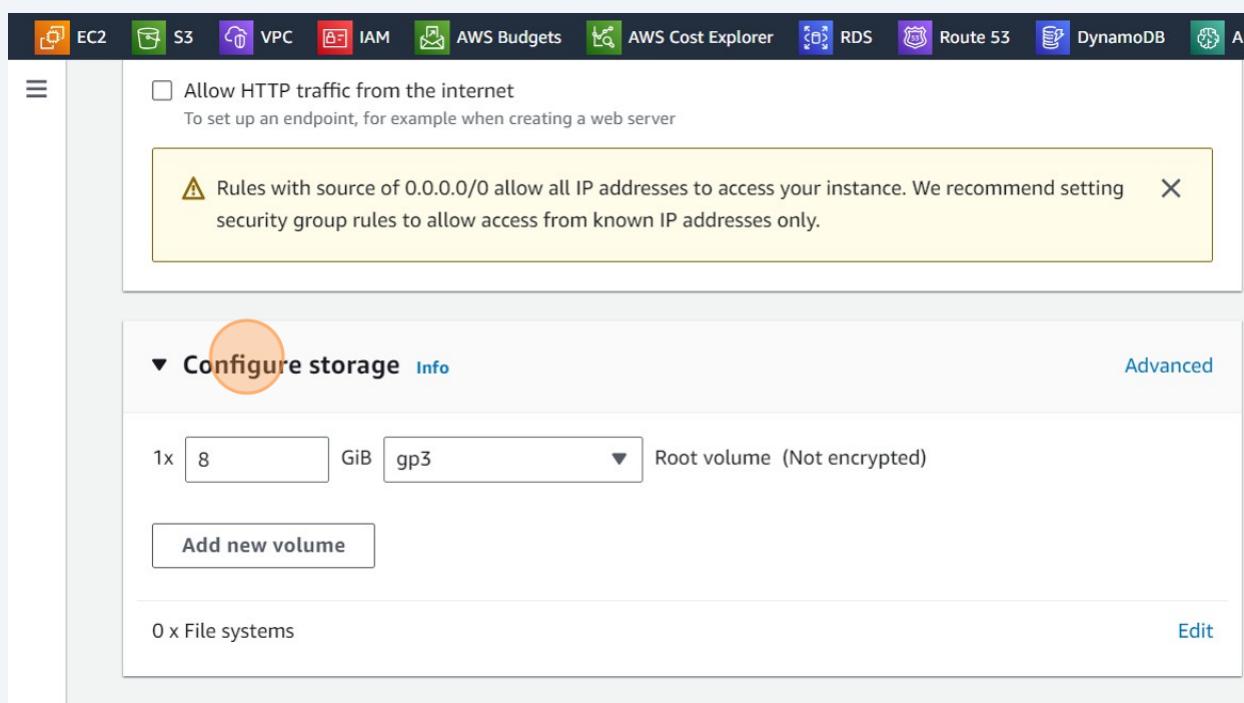
Below the table, the text "volume above" is visible.

How to identify delete on termination Yes or No?

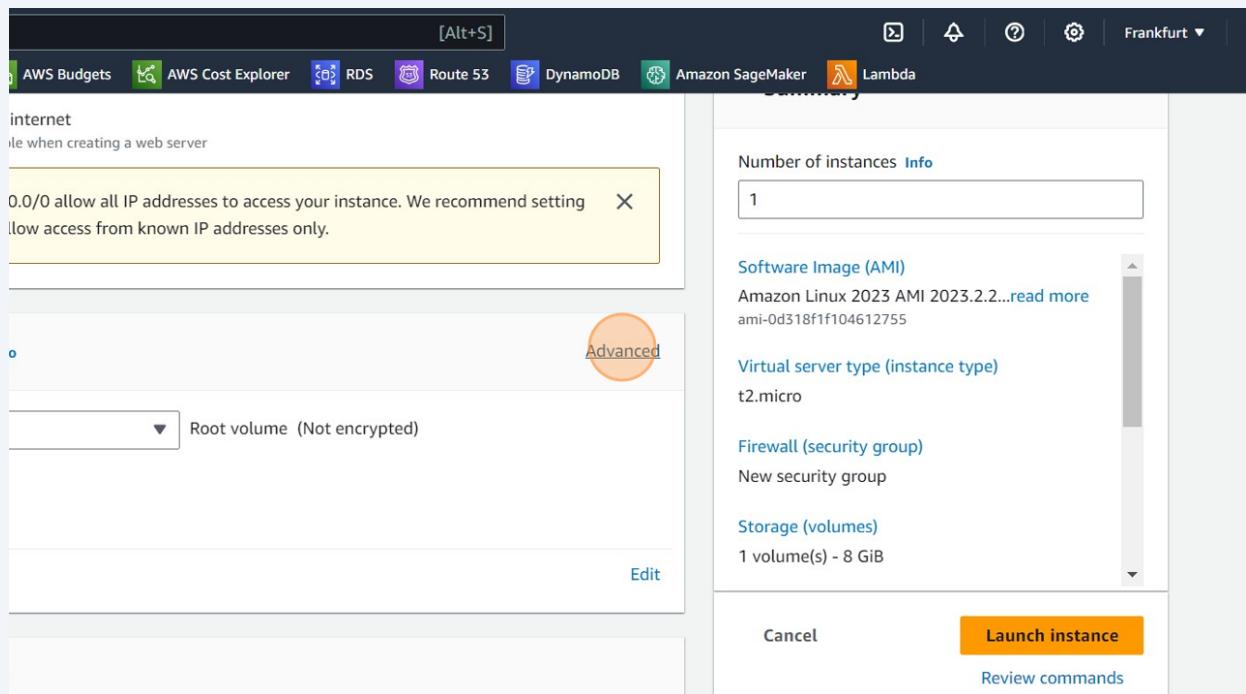
45 Click "Launch instances"



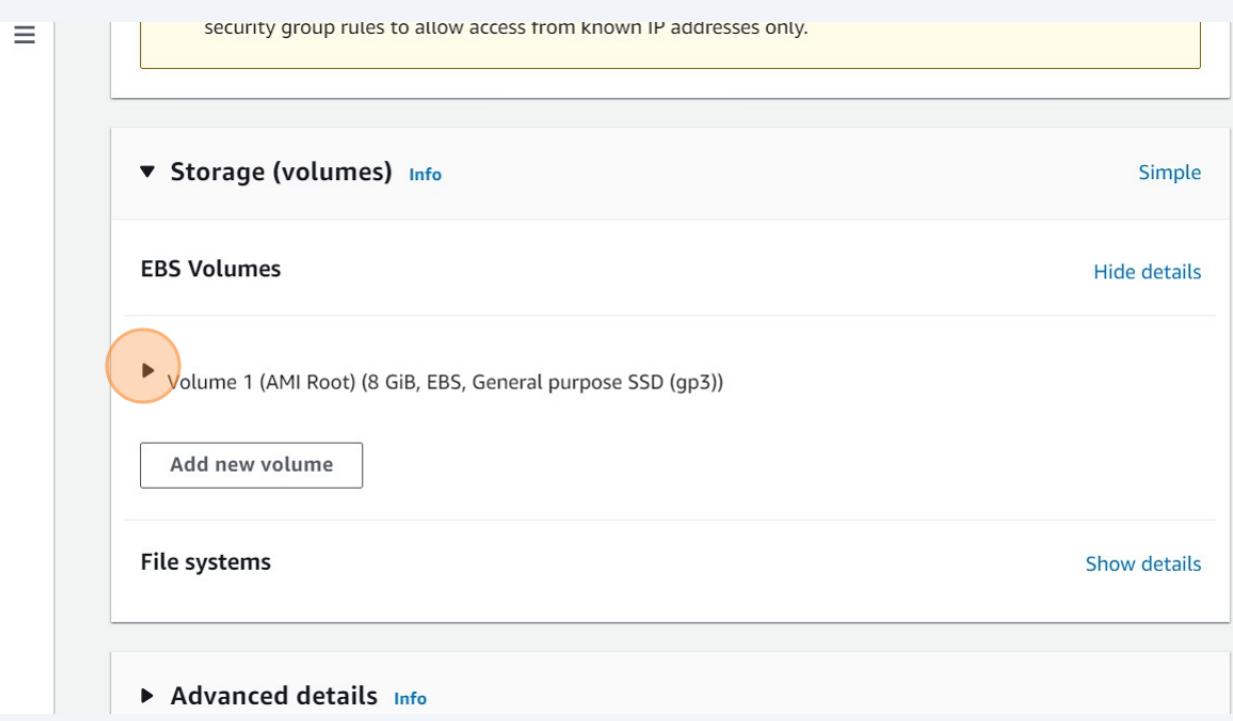
46 Go to "Configure storage"



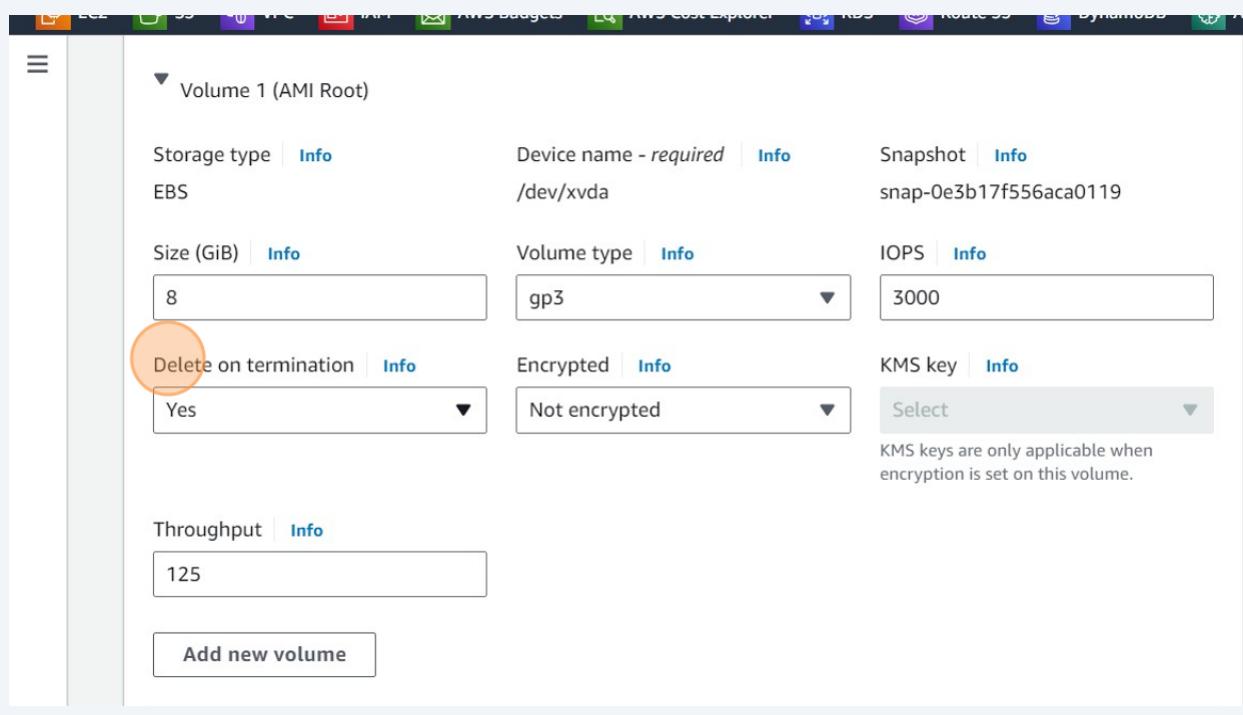
47 Click "Advanced"



48 Open volume.



49 Click "Delete on termination"



50 Select Yes or No

