

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

▼ Network & Security

Security Groups

Elastic IPs

Placement Groups

Key Pairs

Network Interfaces

▼ Load Balancing

Load Balancers

Target Groups

Trust Stores New

▼ Auto Scaling

Auto Scaling Groups

Instances (running) 1

Elastic IPs 0

Load balancers 0

Snapshots 0

Auto Scaling Groups 0

Instances 1

Placement groups 0

Volumes 1

Dedicated Hosts 0

Key pairs 1

Security groups 4

Launch instance

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

Launch instance

Migrate a server

Note: Your instances will launch in the US East (N. Virginia) Region

Instance alarms

View in CloudWatch

0 In alarm

0 OK

0 Insufficient d

Service health

AWS Health Dashboard

Region

US East (N. Virginia)

Zones

Zone name	Zone ID
us-east-1a	use1-az1
us-east-1b	use1-az2
us-east-1c	use1-az4

0 EC2 free tier offers in use

End of month forecast

0 offers forecasted to exceed free tier limit.

Exceeds free tier

0 offers exceeded and is now pay-as-you-go pricing.

View Global EC2 resources

View all AWS Free Tier offers

Account attributes

Default VPC

vpc-0f6e8e5d109f01227

Settings

Data protection and security

Zones

EC2 Serial Console

Default credit specification

Console experiments



Metadata response hop limit [Info](#)

2

Allow tags in metadata [Info](#)

Select

User data - optional [Info](#)

Upload a file with your user data or enter it in the field.

[Choose file](#)

```
#!/bin/bash
dnf install -y httpd
systemctl enable httpd
systemctl start httpd
echo '<html><h1>Hello From Your Web Server!</h1></html>' >
/var/www/html/index.html
```

☐ User data has already been base64 encoded

▼ Summary

Number of instances [Info](#)

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.3.2...[read more](#)  
ami-0440d3b780d96b29d

Virtual server type (Instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

[Free tier](#): In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which

Cancel [Launch instance](#) [Review commands](#)



### Instance launch failed

You are not authorized to perform this operation. User: arn:aws:sts::767397994816:assumed-role/voclabs/user3067532=bitf20m541@pucit.edu.pk is not authorized to perform: ec2:RunInstances on resource: arn:aws:ec2:us-east-1:767397994816:subnet/subnet-05064a9848e8b8524 with an explicit deny in an identity-based policy. Encoded authorization failure message: leFIRpq71uqOHgK18AWsyvYOgt350LWlvcZCk\_uw9wEsuXHhefXK-EdS3FSD85o5FHJhe6NWL3As4OUYOP8TDscUr0Mffs1I-VE0L16A4rA3nUAmkveasNmflKGnEv-K3bK7bv2bL92dtbRuvZrXlwCjBqUdF3r4hNTKVoGYaOQ5VmxFO9y9Q4-Q07omk06JsJ0AjywyppU6CLVPdLquAoNPZUlnmG3rMo1LqfoNaaSkHPHNW\_P\_n1R61ZV3fxloF5CupmsdSXE3xXlCn2CJllgYsA2bwQpQ4R8OG2UyAJJ6FhtDbJc1AXOXwDkz8wpjX1tPHa2DOhNx6XMaoY5x6tiymZ48dihR0lbAj4TfaE9ezxNzSBIN6eMpYRpcrNDAYs5a2forfVvIeHJsWQNC6p4vk\_VhiRmPuYdwmwOlvw0UAdWK1e45qJlhke1g4RrtjNdEeqWNC74PxjKoi6AGvL69D6xcMZ-bftMRWaa8TLGmHFEge5qE29P9Kq2zujZVzPRa38leD2tfUp-6mEI7NBIS5EVk3aNGuj625VDYemYfwpLetgid3li9NMfzh2\_ZzewXBFXRsv5Gnafuwl77JHYJcF6RuKBxJCw-fdR2Bj-lyN7a\_Ku8n0uWvrEglROZoj8hkWBEUM9nl5oGZD6Ru3bMr69RVSLkXNGdghrDQxshV1Y5MftD5\_umg7eM\_CzLQ4b\_XHqkVmLEqgql5YUSrGLPQED5xo7LHs5IWhf1fueaoKt6ZpqkdVN7GFwG8kwJDR-k8qBpb4FdcvY8WY7S7UrOVE3xp0mn5DuXNV8ONLoHDH8TE6Ux3GNnef\_qaYMI0Iq80JS2jOx2NHPV5gR3v7xnknBoWITS\_HRWGqRF69Vz\_rFOUEmky-E02pzImu3PVyCN3-ENk5nuCWmxCAqskTRlsKfC2IGkITN-YCLY3UDCMplQafAFxbThdLYAYebEwHarg\_Bc09I7bqRHlmgW8Mbs

### Launch log

- Initializing requests ✓ Succeeded
- Creating security groups ✓ Succeeded
- Launch initiation ✗ Failed

Cancel

Edit instance config

Retry failed tasks







Success

Successfully initiated launch of instance (i-01f6f5bcc97c631be)

Launch log

- Initializing requests ✓ Succeeded
- Creating security groups ✓ Succeeded
- Launch initiation ✓ Succeeded

Next Steps

What would you like to do next with this instance, for example "create alarm" or "create backup"

< 1 2 3 4 5 6 >

Create billing and free tier usage alerts

To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.

Connect to your instance

Once your instance is running, log into it from your local computer.

Connect to instance

Connect an RDS database

Configure the connection between an EC2 instance and a database to allow traffic flow between them.

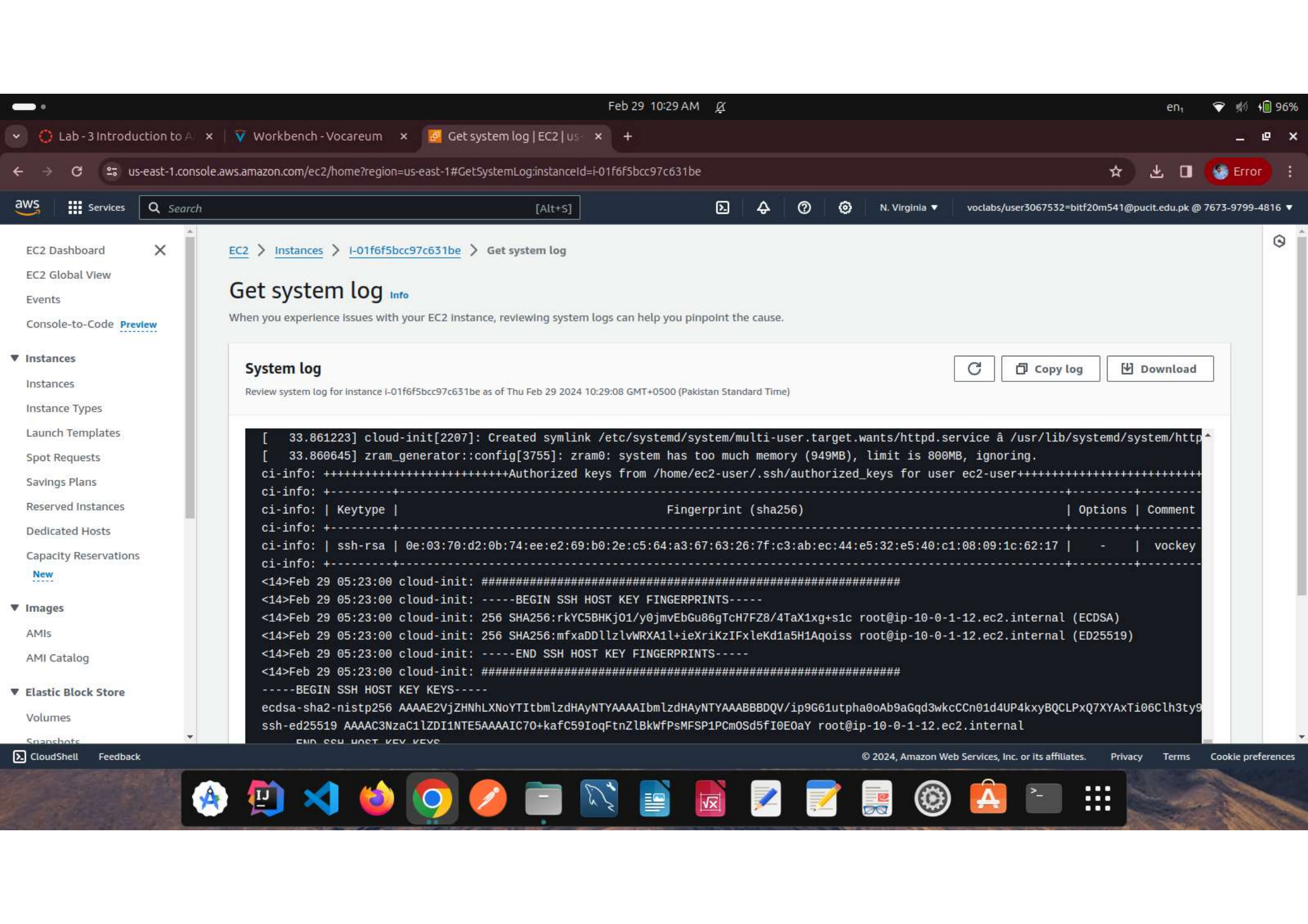
Connect an RDS database

Create EBS snapshot policy

Create a policy that automates the creation, retention, and deletion of EBS snapshots

Create EBS snapshot policy





## Get instance screenshot [Info](#)

### Instance screenshot



Download

i-01f6f5bcc97c631be (Web Server) on 2024-02-29 at T10:30:24.103 +05:00

```
Amazon Linux 2023
Kernel 6.1.77-99.164.amzn2023.x86_64 on an x86_64 (-)

ip-10-0-1-12 login: [ 32.392606] zram_generator::config[2375]: zram0: system h
as too much memory (949MB), limit is 800MB, ignoring.
[ 33.860645] zram_generator::config[3755]: zram0: system has too much memory (
949MB), limit is 800MB, ignoring.
```





	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input checked="" type="checkbox"/>	Web Server	i-01f6f5bcc97c631be	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a>	us-east-1a	ec2-44-213-118-74.c
<input type="checkbox"/>	Bastion Host	i-0f87f59884c066c15	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a>	us-east-1a	ec2-44-204-113-47.c

Instance: i-01f6f5bcc97c631be (Web Server)

## Details

Status and alarms [New](#)

### Monitoring

## Security

## Networking

### Storage

## Tags

▼ Instance summary [Info](#)

Instance ID

 i-01f6f5bcc97c631be (Web Server)

IPv6 address

—

Hostname type

IP name: ip-10-0-1-12.ec2.internal

Answer private resource DNS name

Public IPv4 address

44.213.118.74 | [open address](#)

### Instance state

Running

Private IP DNS name (IPv4 only)

ip-10-0-1-12.ec2.internal

Instance type

Private IPv4 addresses

10.0.1.12

Public IPv4 DNS

 ec2-44-213-118-74.compute-1.amazonaws.com [open address](#) 

Elastic IP addresses

- EC2 Dashboard
- EC2 Global View
- Events
- Console-to-Code [Preview](#)
- ▼ Instances
  - Instances
  - Instance Types
  - Launch Templates
  - Spot Requests
  - Savings Plans
  - Reserved Instances
  - Dedicated Hosts
  - Capacity Reservations [New](#)
- ▼ Images
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  - AMI Catalog
- ▼ Elastic Block Store
  - Volumes
  - Snapshots

✓ Inbound security group rules successfully modified on security group (sg-0b6ac55471dab9ff0 | Web Server security\_group)

Details

### Security Groups (5) [Info](#)

⌂ ⚙

1

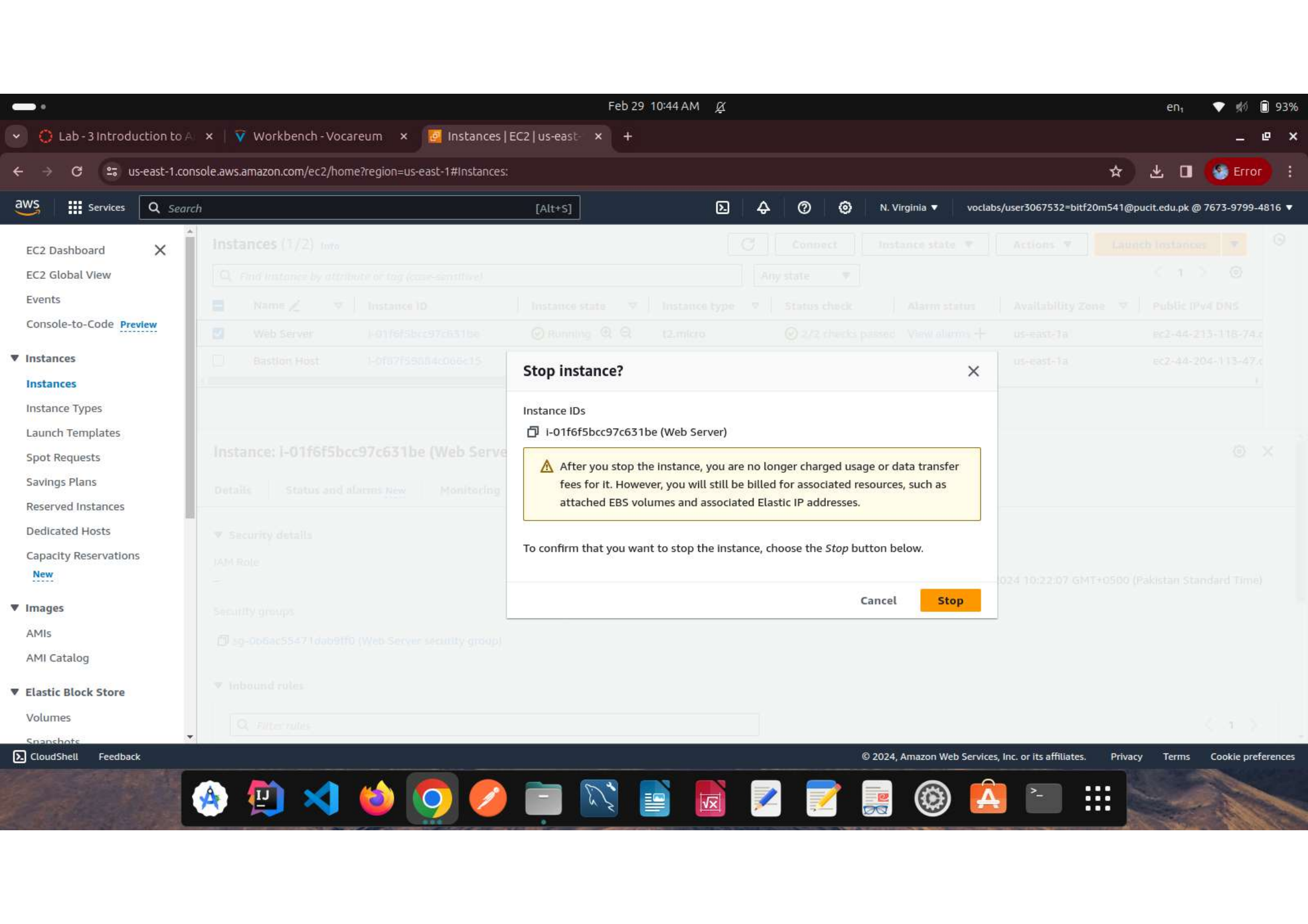
<input type="checkbox"/>	Name ▾	Security group ID ▾	Security group name ▾	VPC ID ▾	Description
<input type="checkbox"/>	-	<a href="#">sg-0d5be17fdbf58550a</a>	default	<a href="#">vpc-0f6e8e5d109f01227</a>	default VPC security group
<input type="checkbox"/>	-	<a href="#">sg-0165d6e939b89af31</a>	Ec2SecurityGroup	<a href="#">vpc-0cc06fb2c480bca59</a>	VPC Security Group





# Hello From Your Web Server!





EC2 > Instances > i-01f6f5bcc97c631be > Change instance type

## Change instance type [Info](#)

You can change the instance type only if the current instance type and the instance type that you want are compatible.

Instance ID

i-01f6f5bcc97c631be (Web Server)

Current instance type

t2.micro Free Tier eligible

New instance type

t2.small

☐ EBS-optimized

EBS-optimized is not supported for this instance type.



### Charges may apply

You are currently using t2.micro under the Free Tier. If you change to t2.small you will no longer be under the Free Tier and you will be charged for instance usage.

### ▼ Instance type comparison

Attribute	t2.micro	t2.small
-----------	----------	----------







## Connect

Instance state ▼

Actions ▼

### Launch instances



Find Instance by attribute or tag (case-sensitive)

Any state ▼


< 1 > 

<input type="checkbox"/>	Name 	Instance ID	Instance state 	Instance type 	Status check	Alarm status	Availability Zone 	Public IPv4 DNS
<input type="checkbox"/>	Web Server	<a href="#">i-01f6f5bcc97c631be</a>	 Stopped  	t2.small	-	<a href="#">View alarms</a> 	us-east-1a	-
<input type="checkbox"/>	Bastion Host	<a href="#">i-0f87f59884c066c15</a>	 Running  	t2.micro	 2/2 checks passed	<a href="#">View alarms</a> 	us-east-1a	ec2-44-204-113-47.c

### Select an instance

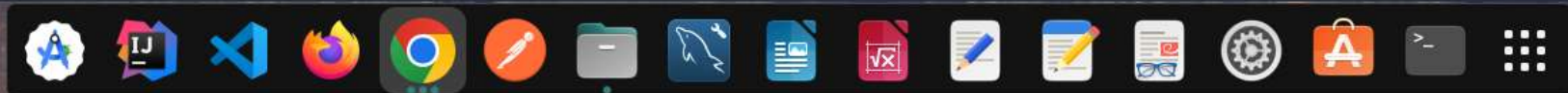


## Change stop protection [Info](#)

Instance ID  
 **i-01f6f5bcc97c631be** (Web Server)

Stop protection  
☒ Enable

Save



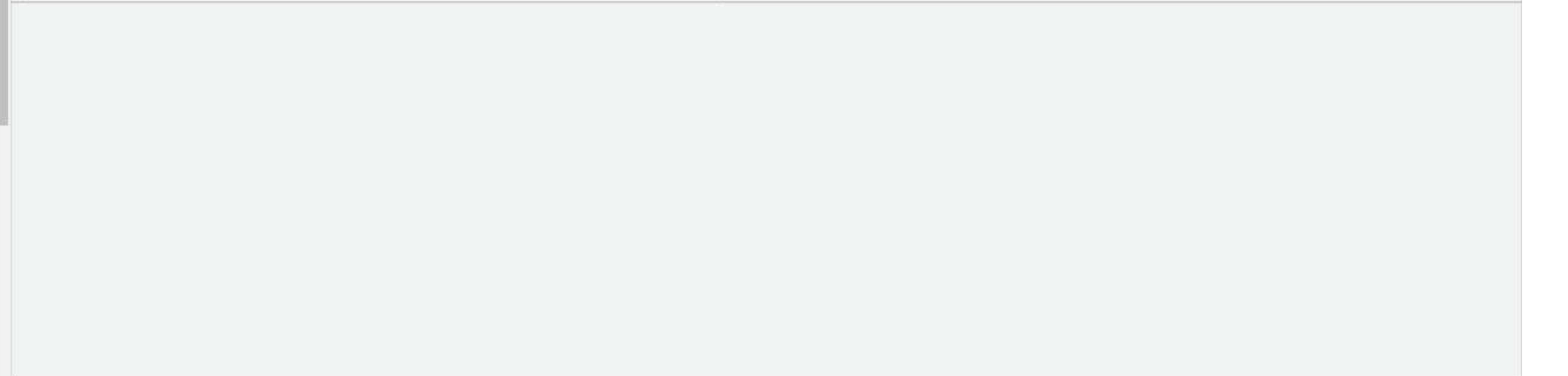
- EC2 Dashboard
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Requested volume modification for volume [vol-089112a4f362dee97](#).  
The volume is being modified.

Volumes (2) [Info](#) [Refresh](#) [Actions](#) [Create volume](#)

< 1 > [Settings](#)

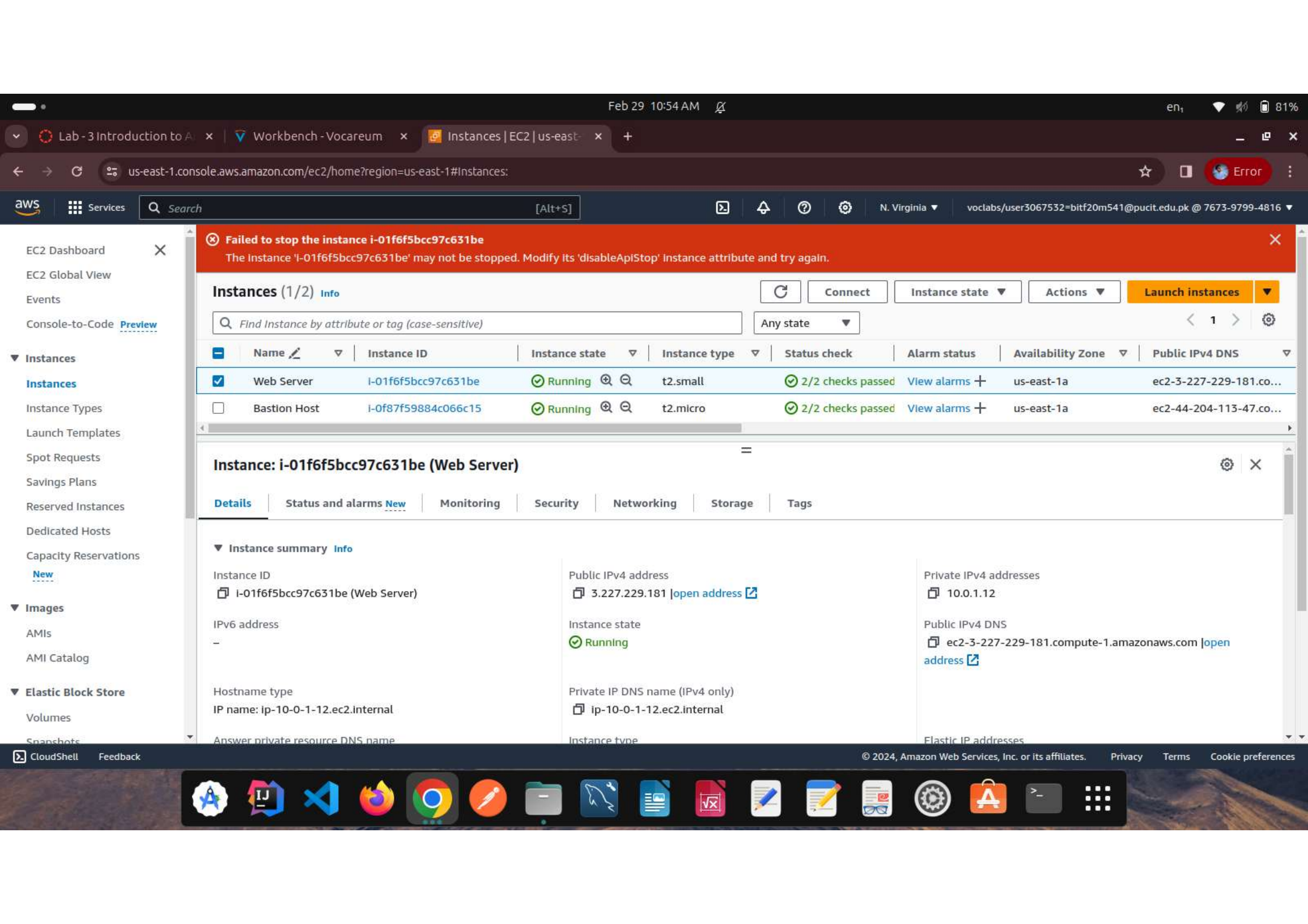
<input type="checkbox"/>	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created	Availability
<input type="checkbox"/>	-	<a href="#">vol-08c0d2d50e7b2553a</a>	gp3	8 GIB	3000	125	snap-0fc9d6b...	2024/02/29 09:58 GMT+5	us-east-1a
<input type="checkbox"/>	-	<a href="#">vol-089112a4f362dee97</a>	gp3	8 GIB	3000	125	snap-0fc9d6b...	2024/02/29 10:22 GMT+5	us-east-1a

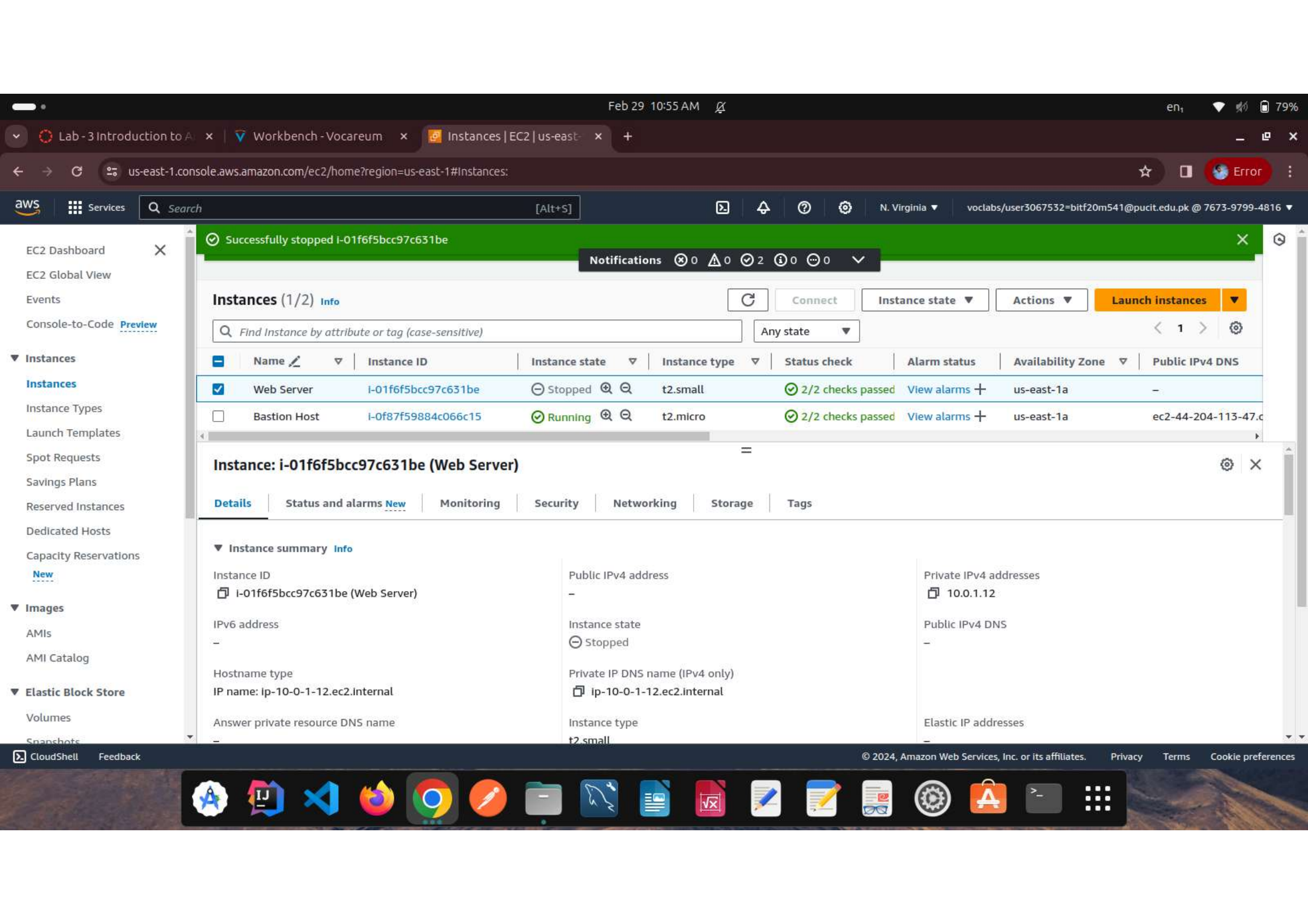


Summary for all volumes in this Region [^](#)









Feb 29 10:59 AM

en<sub>1</sub> 75%

Lab - 3 Introduction to AWorkbench - VocareumInstances | EC2 | us-east-

labs.vocareum.com/main/main.php?m=clabide&mode=s&asnid=2610316&stepid=2610317&hideNavBar=1

00:57▶ Start Lab■ End Labi AWS Detailsi Details

EN-US

You can stop your instance when you do not need to access but you would still like to retain it. In this task, you will learn how to use *stop protection*.

54. In the AWS Management Console, in the search box next to **Services**, search for and choose **EC2** to return to the EC2 console.

55. In left navigation pane, choose **Instances**.

56. Select the **Web Server** instance and in the **Instance state** menu, select **Stop instance**.

57. Then choose **Stop**

Note that there is a message that says: *Failed to stop the instance i-1234567xxx. The instance 'i-1234567xxx' may not be stopped. Modify its 'disableApiStop' instance attribute and try again.*

This shows that the stop protection that you enabled earlier in this lab is now providing a safeguard to prevent the accidental stopping of an instance. If you really want to stop the instance, you will need to disable the stop protection.

58. In the **Actions** menu, select **Instance settings** ▶ **Change stop protection**.

SubmitSubmission ReportGrades

Total score	25/25
Task 1 - EC2 instance created correctly	5/5
Task 2 - get system log requested	5/5
Task 3 - security group updated	5/5
Task 4 - EC2 Instance updated	5/5
Task 6 - Instance stopped on second try	5/5