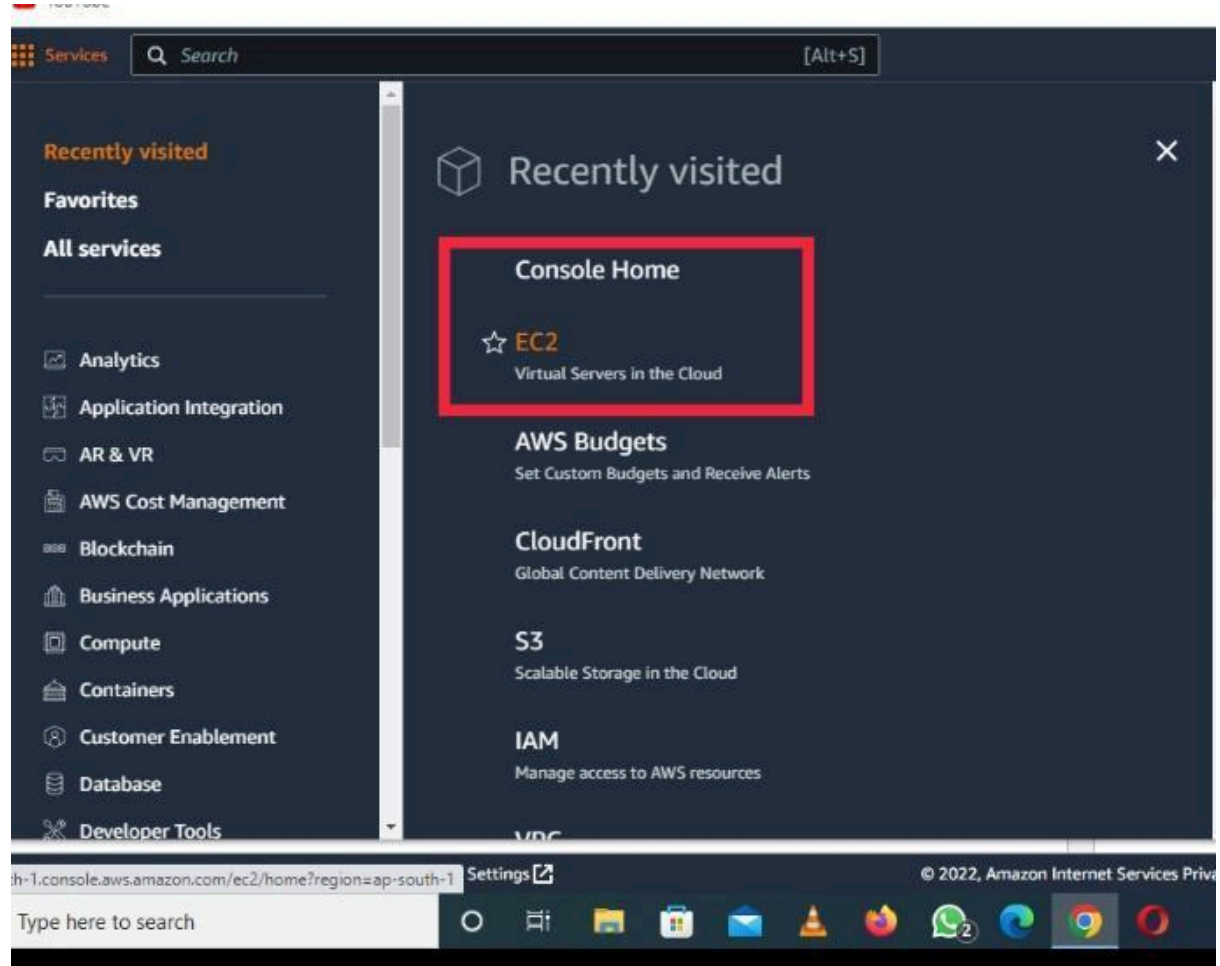


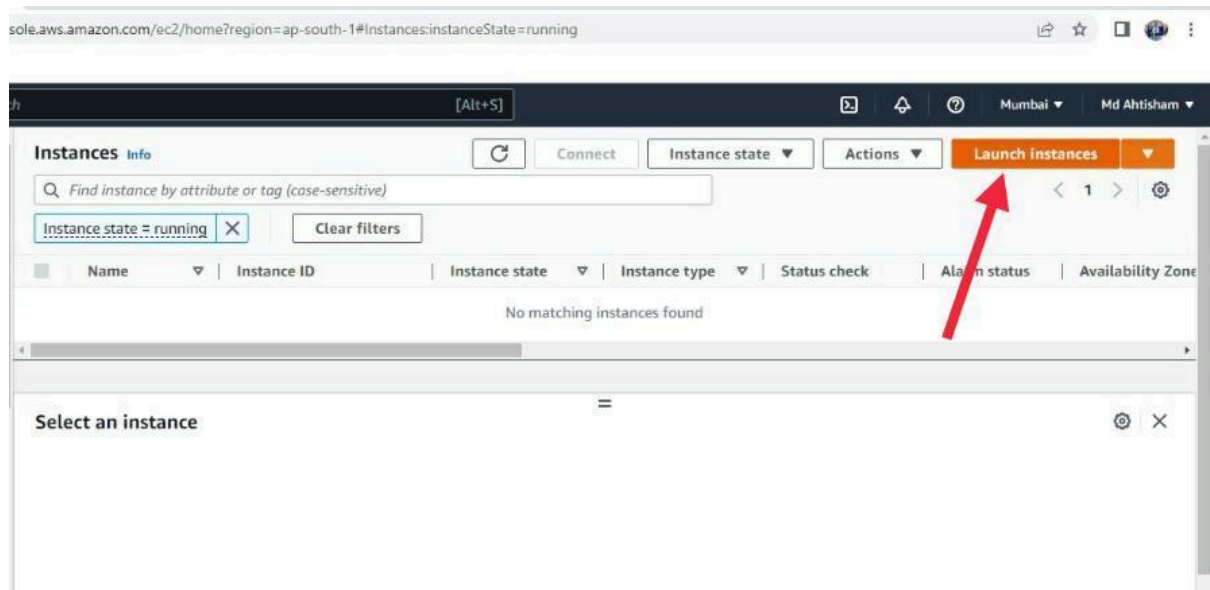
8. Perform an experiment to allocate a new Elastic IP to an EC2 instance

Step 1: Click on All services.

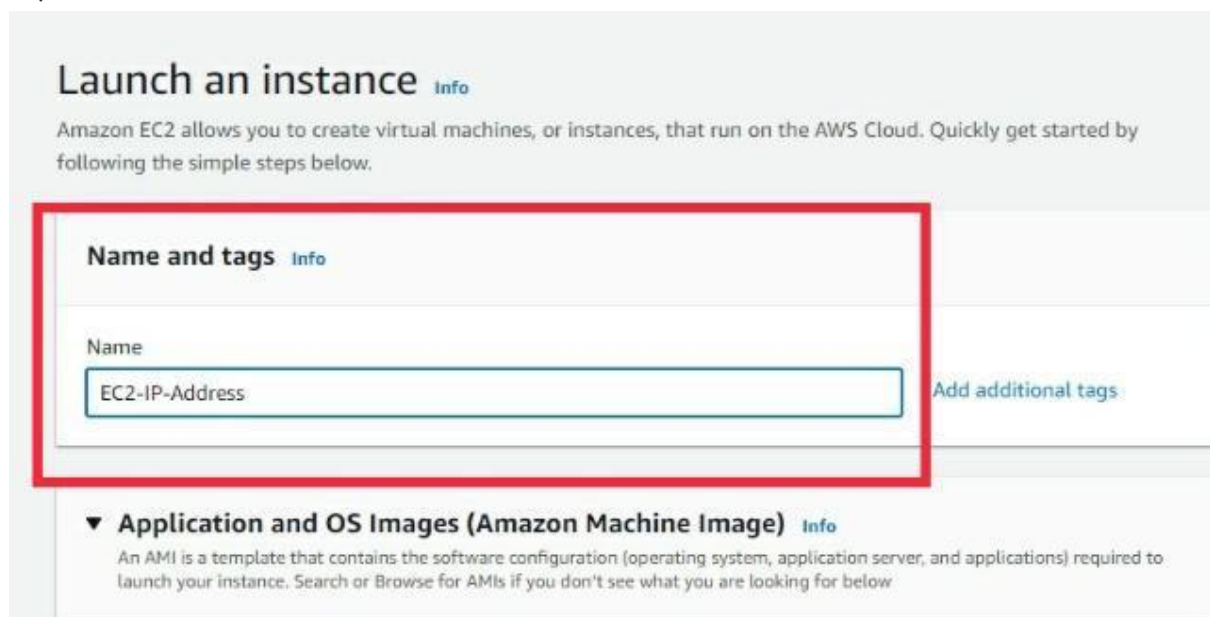
Step 2: Click on the [EC2](#).



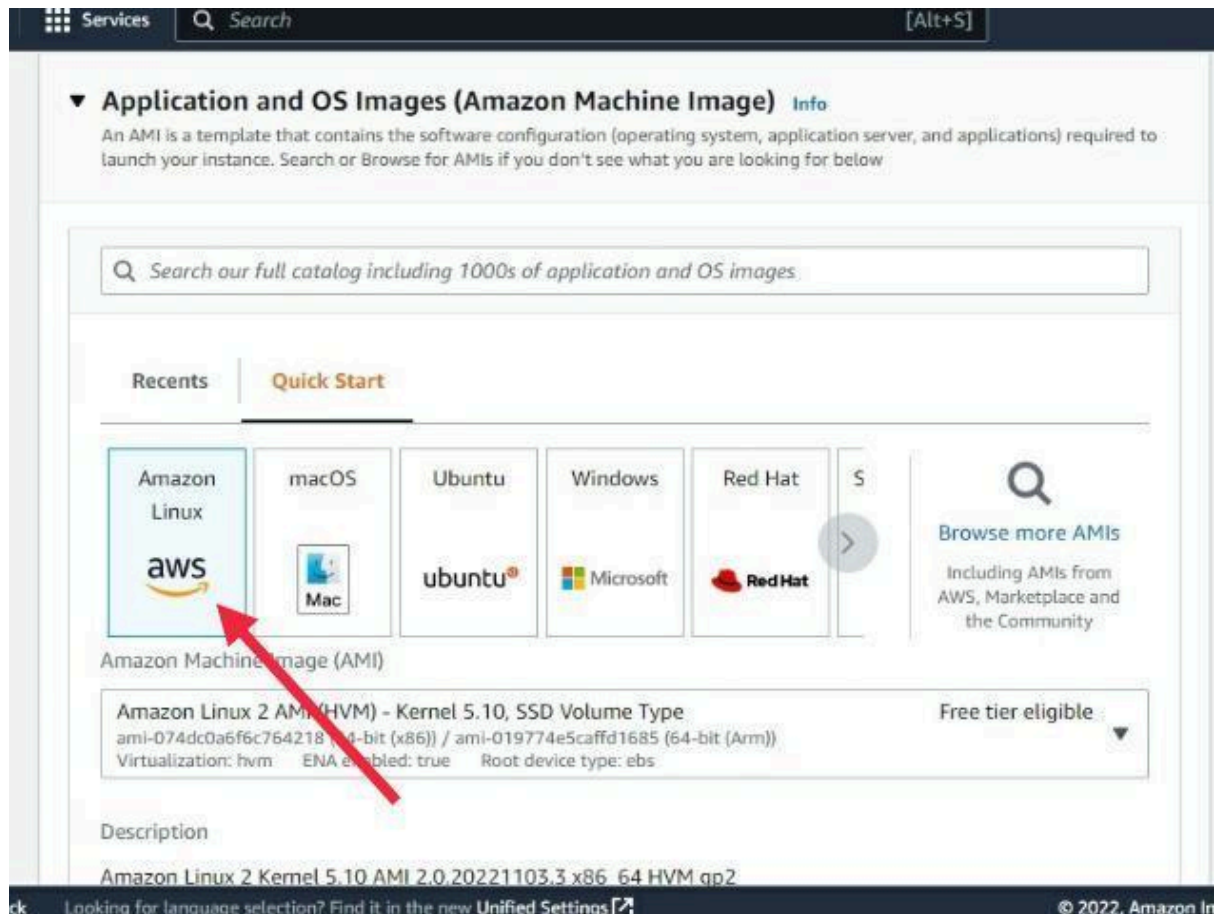
Step 3: Click on the Launch Instances.



Step 4: Give the EC2 instance **name** or **tag** -> “EC2-IP-Address” is name in my case.

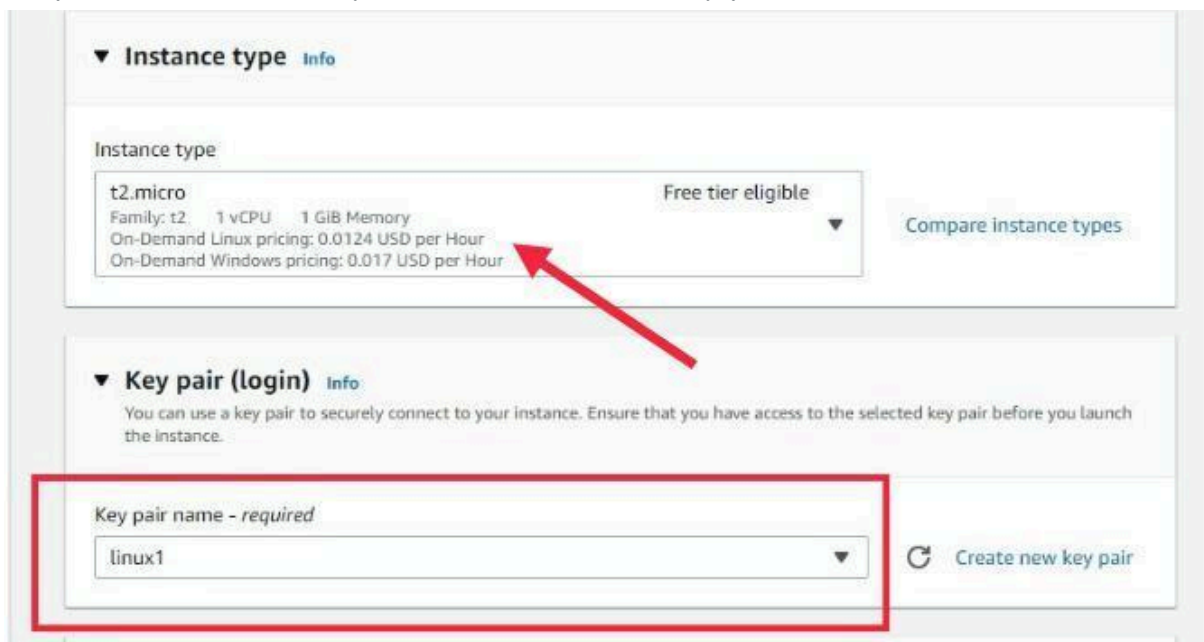


Step 5: Choose **Amazon Machine Image** for your instance.

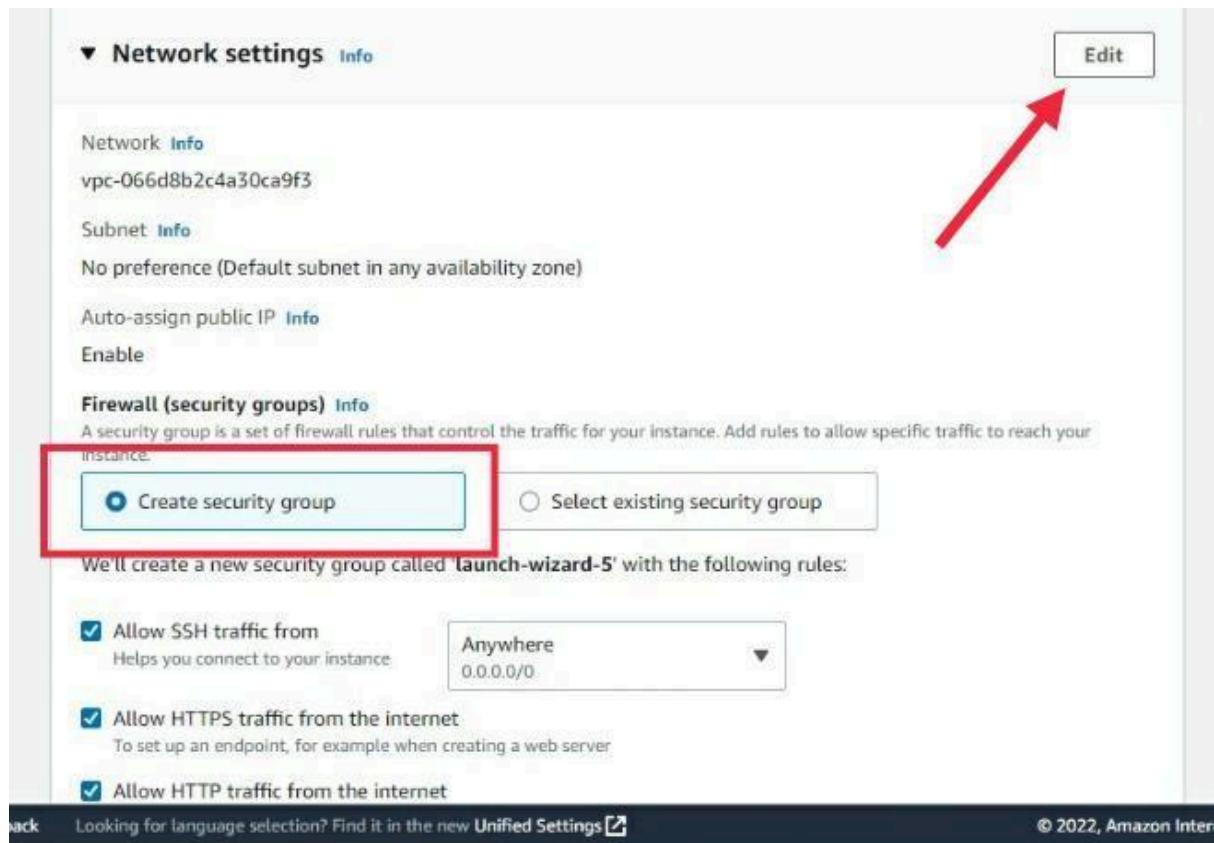


Step 6: Choose an **Instance type**.

Step 7: Choose the **Key Pair** or **Create the Key pair**.



Step 8: Click on the **Create Security Group**, then Click on the EDIT button.



Network settings [Info](#)

Network [Info](#)
vpc-066d8b2c4a30ca9f3

Subnet [Info](#)
No preference (Default subnet in any availability zone)

Auto-assign public IP [Info](#)
Enable

Firewall (security groups) [Info](#)
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Create security group ☐ Select existing security group

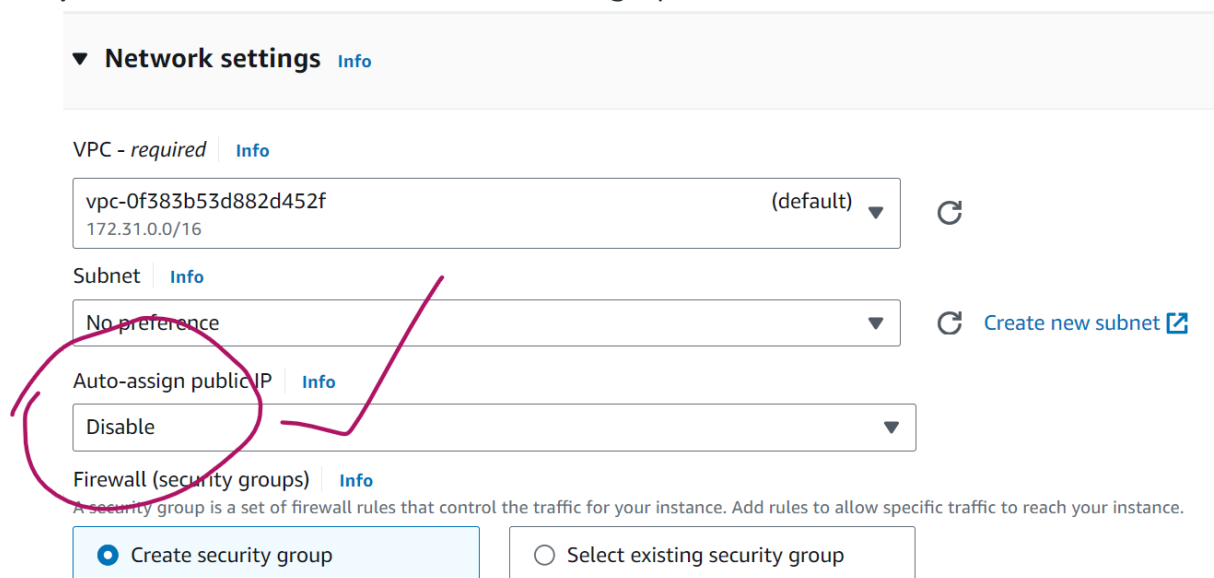
We'll create a new security group called 'launch-wizard-5' with the following rules:

- ☒ Allow SSH traffic from Anywhere (0.0.0.0/0)
- ☒ Allow HTTPS traffic from the internet
- ☒ Allow HTTP traffic from the internet

[back](#) Looking for language selection? Find it in the new [Unified Settings](#)

© 2022, Amazon Inter

Step 9: Must be Disable the Auto Assign public IP.



Network settings [Info](#)

VPC - required [Info](#)
vpc-0f383b53d882d452f (default)

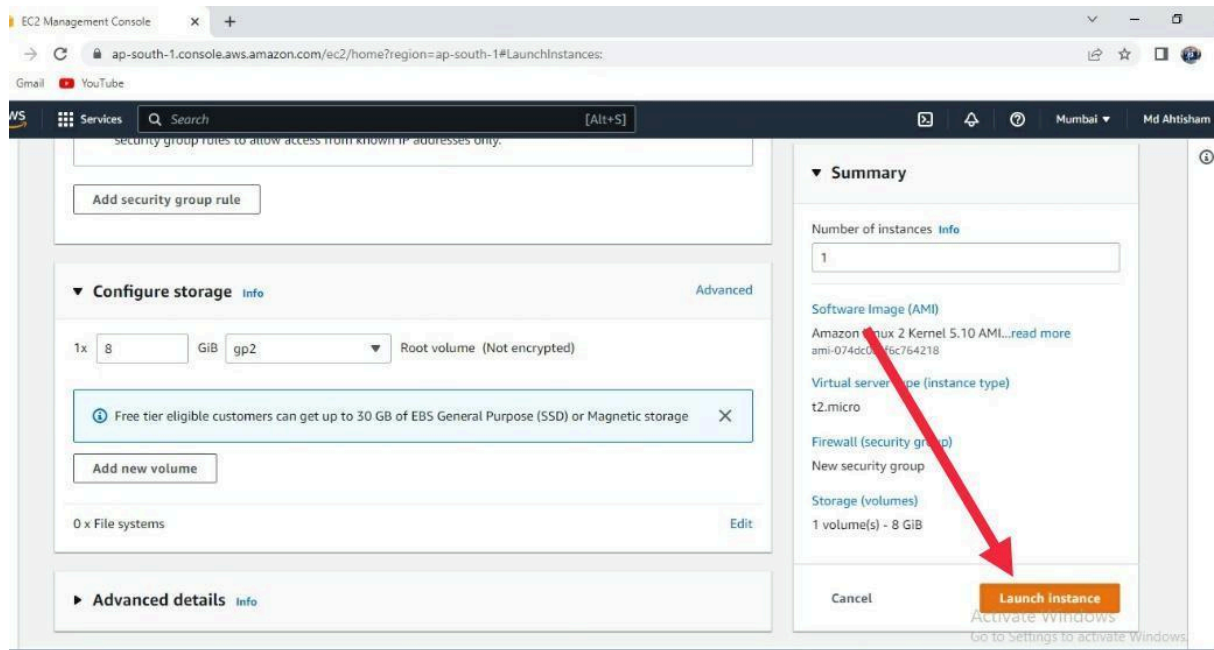
Subnet [Info](#)
No preference [Create new subnet](#)

Auto-assign public IP [Info](#)
Disable

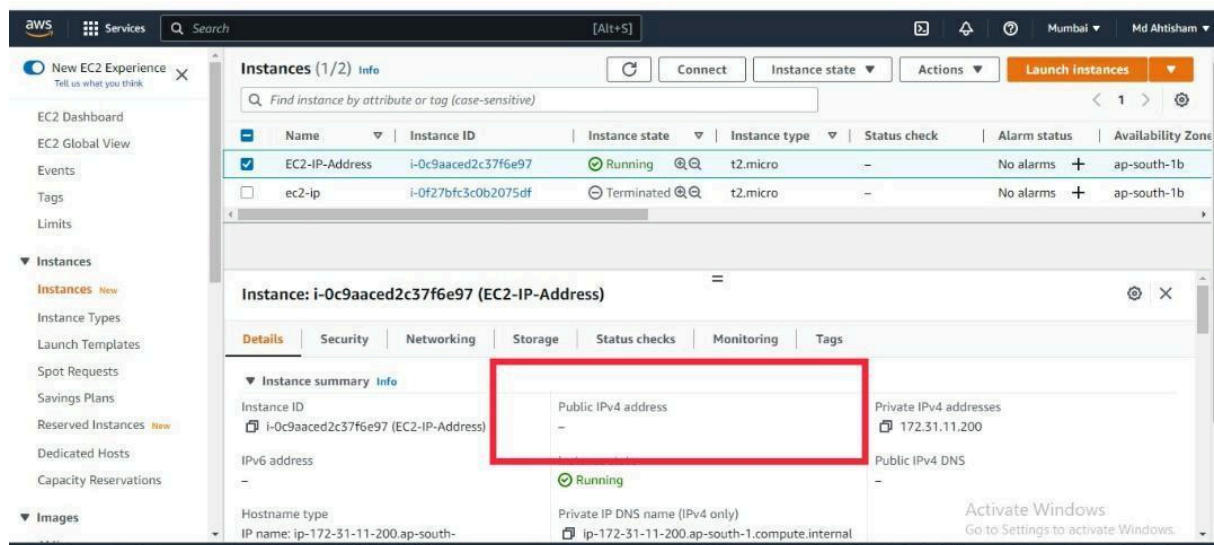
Firewall (security groups) [Info](#)
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Create security group ☐ Select existing security group

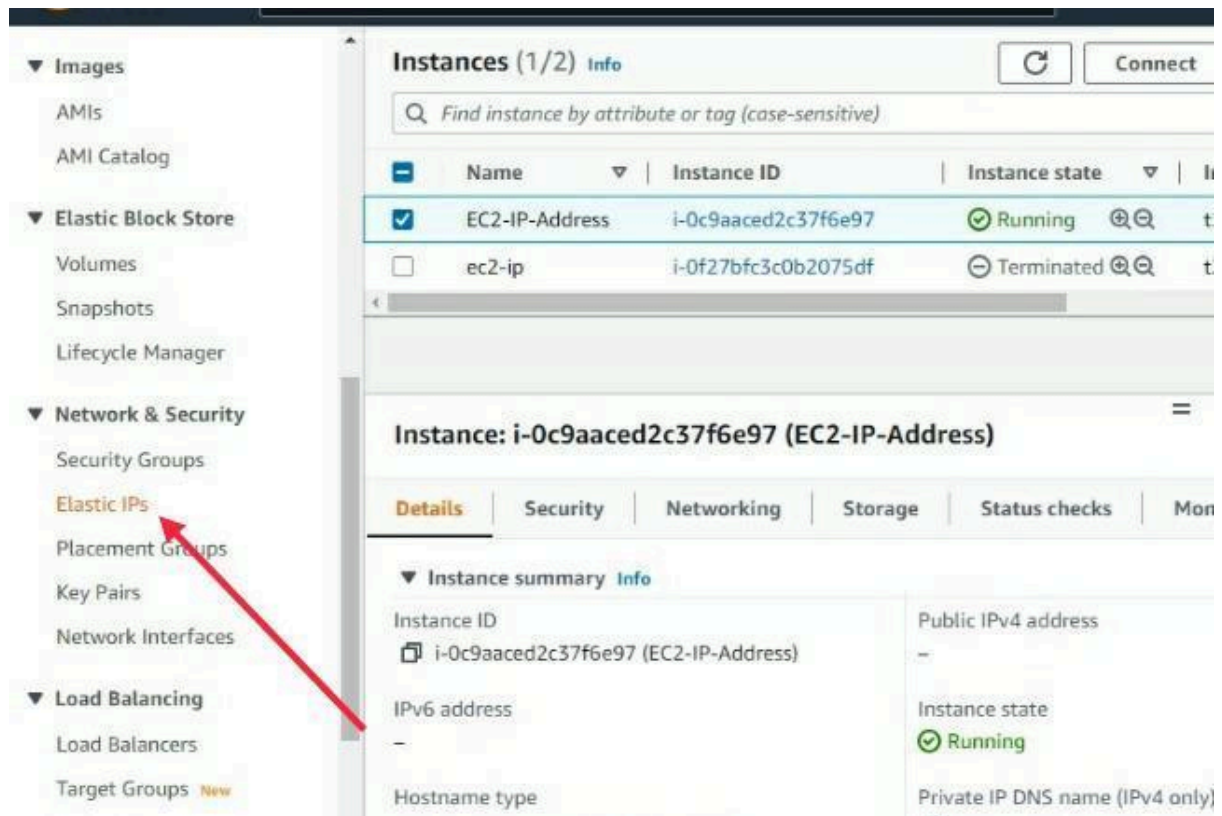
Step 10: Click on the **Launch Instance** button.



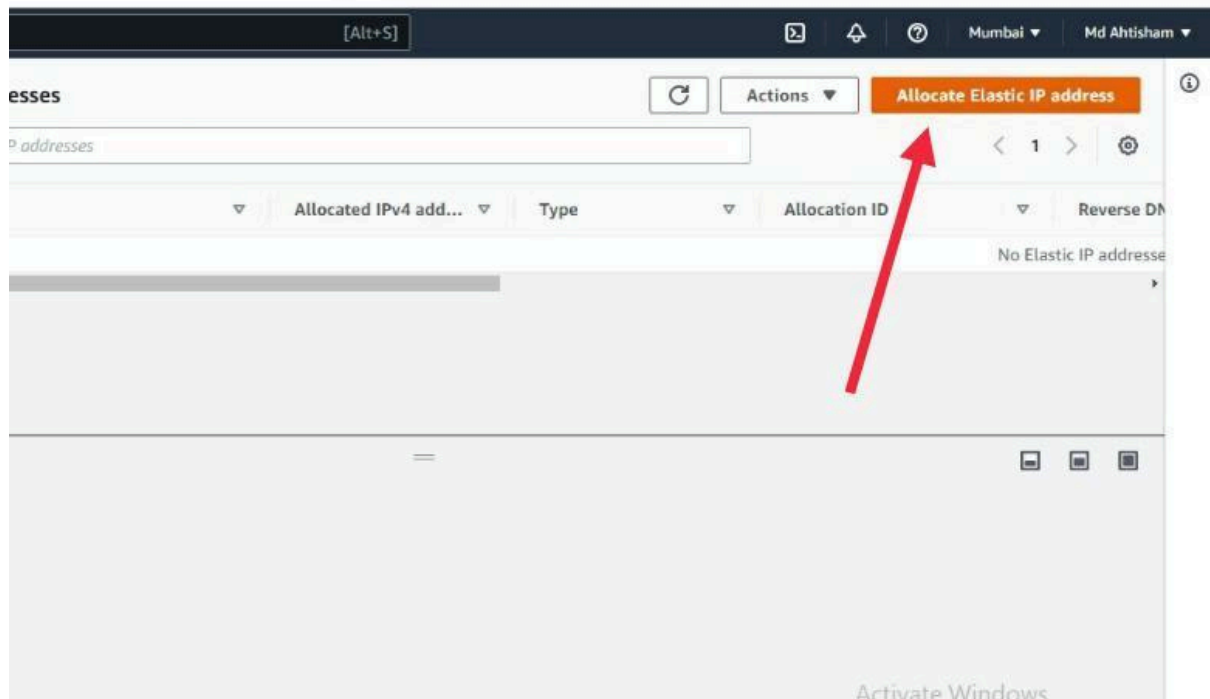
Now you can see the Public IPv4 is not assigned. Now it's time to manually configure the IP-Address



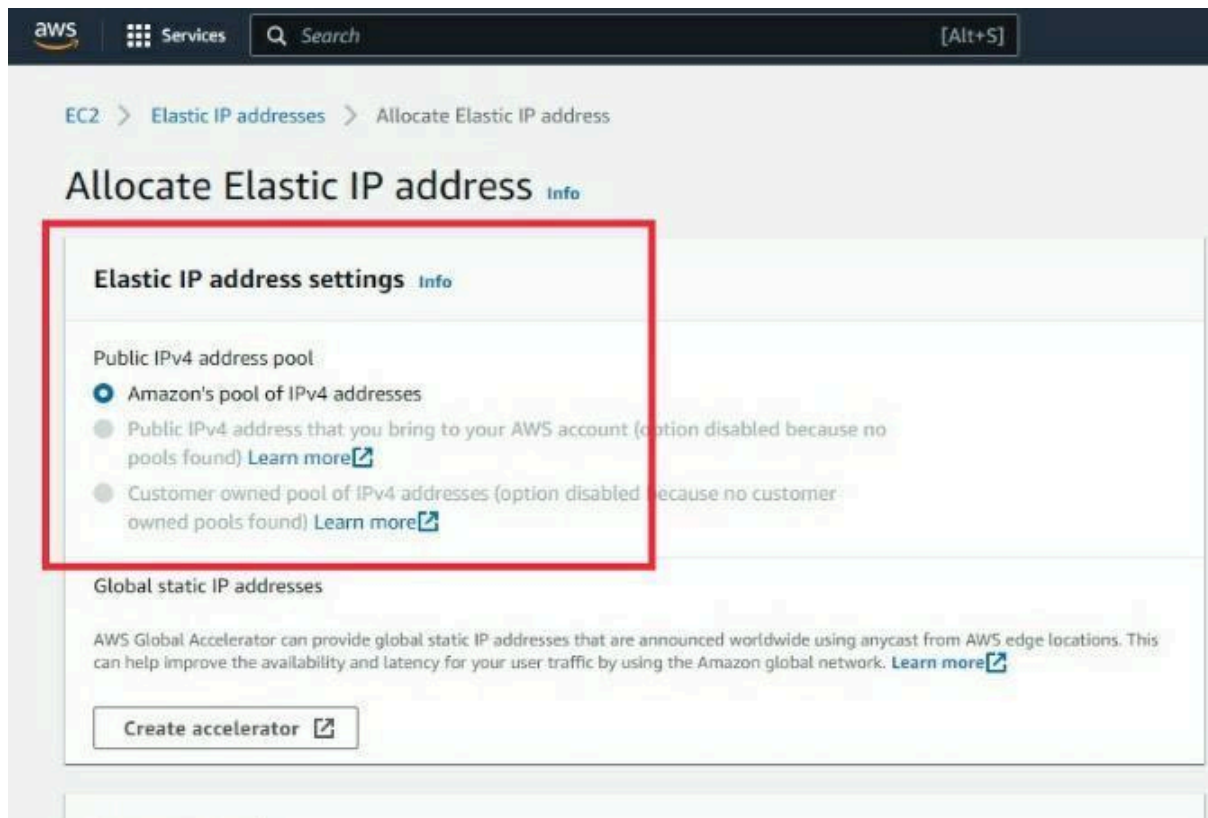
Step 11: Scroll down and Click on the **Elastic IPs**.



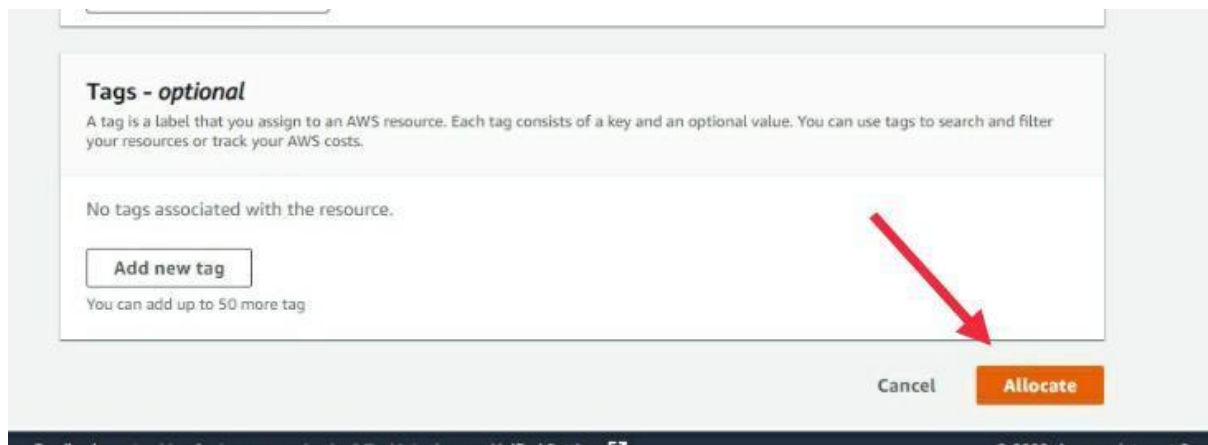
Step 12: Click on the **Allocate Elastic IP Address**.



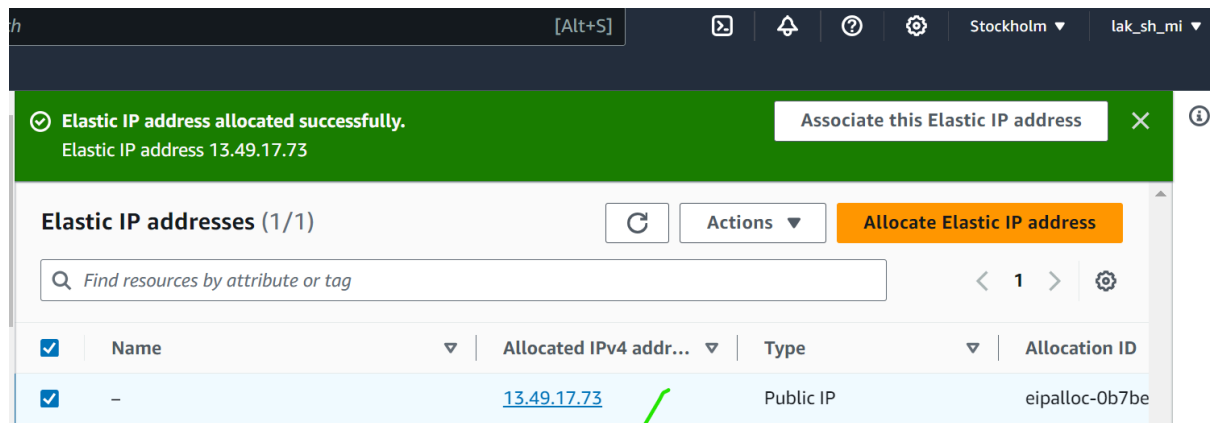
Elastic IP Address setting – Default setting.



Step 13: Click on the **Allocate**.

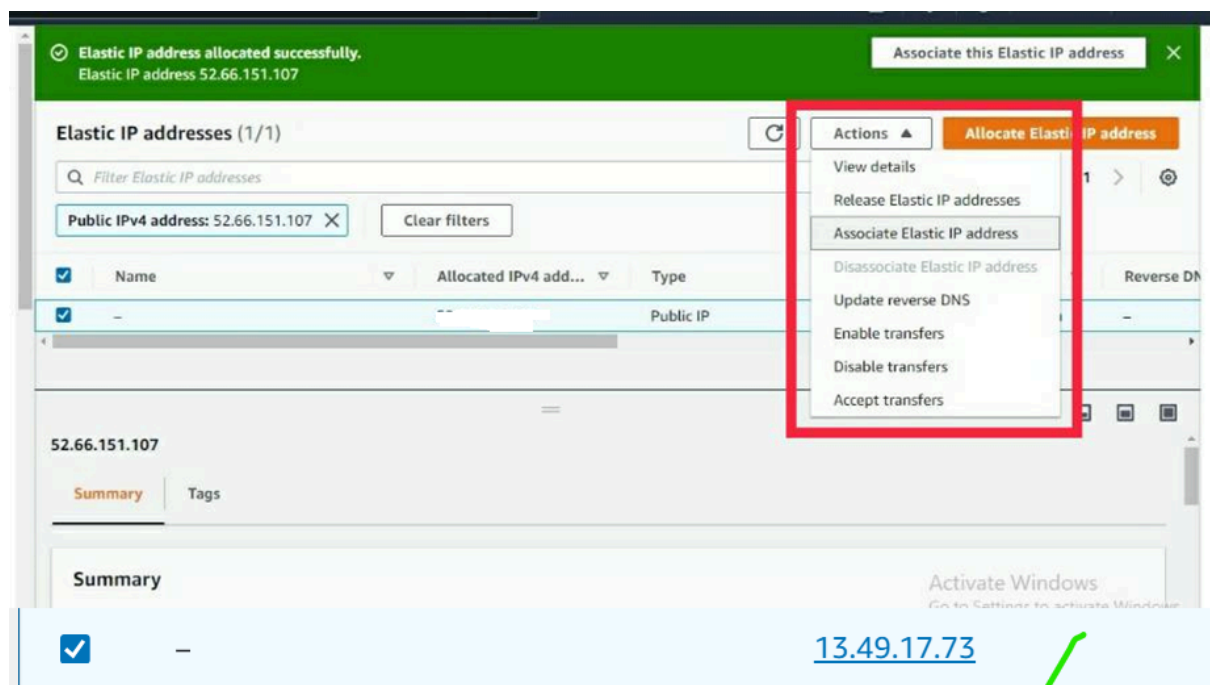


Step 14: Click on the **IP Address**, you will see the **Allocated IP Address** [13.49.17.73](#).



Step 15: Select the IP-Address -> Click on the **Action**, then select the **Associate Elastic IP Address**.

Ntnote



Note down the IP Address in observation notebook, for later reference.

aws Services Search [Alt+S]

VPC IAM RDS

EC2 > Elastic IP addresses > Associate Elastic IP address

Associate Elastic IP address Info

Choose the instance or network interface to associate to this Elastic IP address (13.49.17.73)

Elastic IP address: 13.49.17.73

Resource type
Choose the type of resource with which to associate the Elastic IP address.

☒ Instance

☐ Network interface

⚠ If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. [Learn more](#)

If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.

i-01bfd4ad8921238d6 (Lux-EIP) - running

Q i-01bfd4ad8921238d6 X

Private IP address
The private IP address with which to associate the Elastic IP address.

Q Choose a private IP address

Associate Elastic IP Address -> Instance – **Choose an instance** and Select the instance where you wants to allocate IP Address.

Step 16: Click on the **Associate Button**

Elastic IP address: 52.66.151.107

Resource type
Choose the type of resource with which to associate the Elastic IP address.

☒ Instance

☐ Network interface

Warning: If you associate an Elastic IP address to an instance that already has an Elastic IP address associated, this previously associated Elastic IP address will be disassociated but still allocated to your account. [Learn more](#)

Instance

Private IP address
The private IP address with which to associate the Elastic IP address.

Reassociation
Specify whether the Elastic IP address can be reassociated with a different resource if it already associated with a resource.

☐ Allow this Elastic IP address to be reassociated

Cancel **Associate**

Step 17: Go to the Instance and Select the **Instance** and now you can see the **Public IPv4 Address** [13.49.17.73](#).

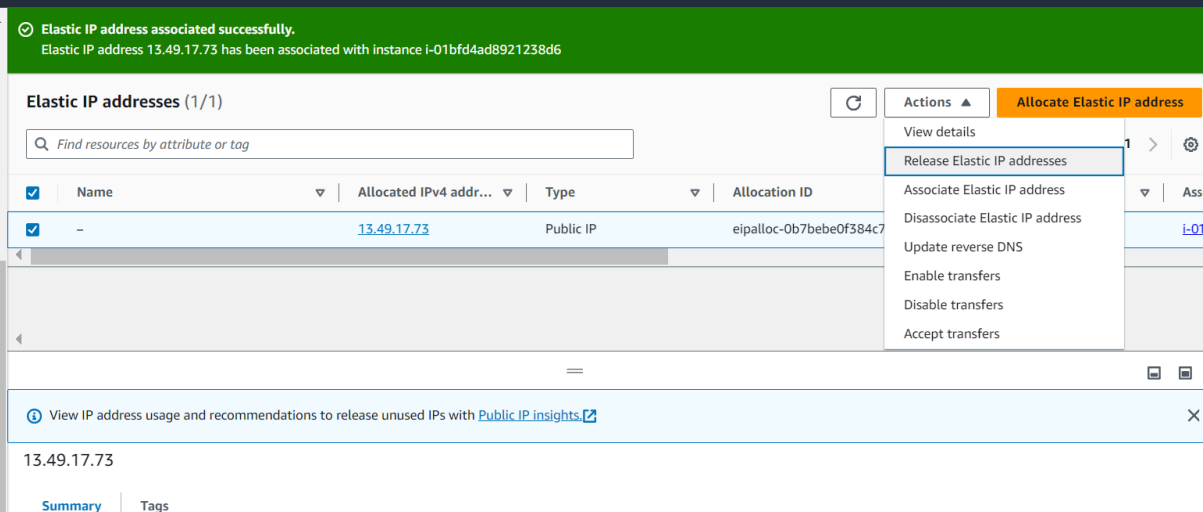
Instance summary for i-01bfd4ad8921238d6 (Lux-EIP)

Updated less than a minute ago

Instance ID i-01bfd4ad8921238d6 (Lux-EIP)	Public IPv4 address 13.49.17.73 open address	Private IPv4 addresses 172.31.12.73
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-13-49-17-73.eu-north-1.compute.amazonaws.com open address
Hostname type IP name: ip-172-31-12-73.eu-north-1.compute.internal	Private IP DNS name (IPv4 only) ip-172-31-12-73.eu-north-1.compute.internal	Elastic IP addresses 13.49.17.73 [Public IP]
Answer private resource DNS name IPv4 (A)	Instance type t3.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address -	VPC ID vpc-0f383b53d882d452f	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-09a7fe7f0bb222ef6	
IMDSv2 Required		

Step 18: **(important step – Don't skip)** After taking screenshot of the “Public IPV4 address), ie the IP address you were able to get, you may release the IP and delete the instance.

18->a) go to release Elastic IP Addresses, it will give a message that the same is associated with an instance



Elastic IP address associated successfully.
Elastic IP address 13.49.17.73 has been associated with instance i-01bfd4ad8921238d6

Elastic IP addresses (1/1)

Find resources by attribute or tag

<input checked="" type="checkbox"/>	Name	Allocated IPv4 address	Type	Allocation ID
<input checked="" type="checkbox"/>	-	13.49.17.73	Public IP	eipalloc-0b7bebe0f384c7

Actions: View details, Release Elastic IP addresses, Associate Elastic IP address, Disassociate Elastic IP address, Update reverse DNS, Enable transfers, Disable transfers, Accept transfers

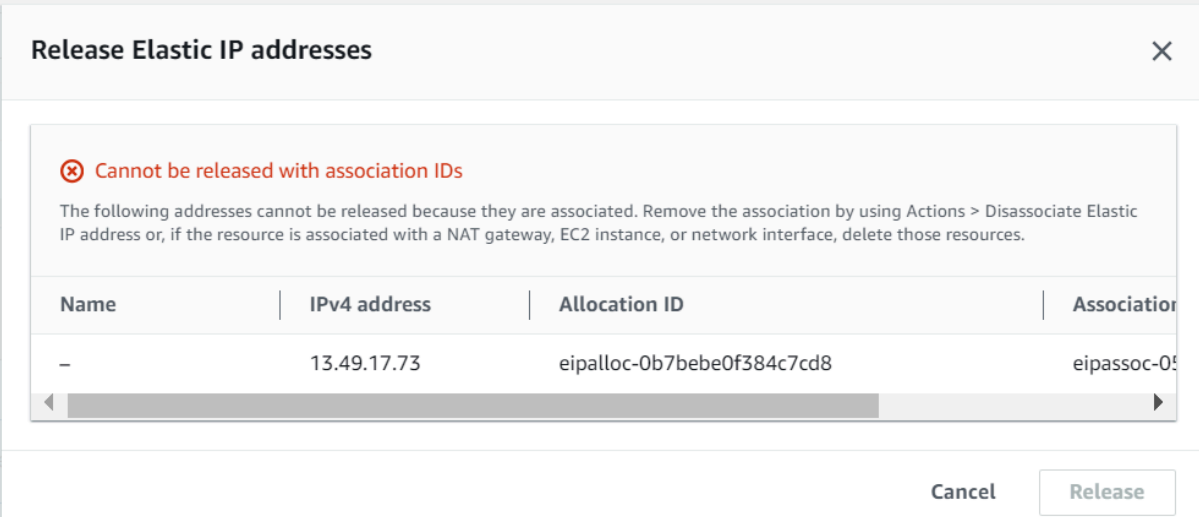
Allocate Elastic IP address

View IP address usage and recommendations to release unused IPs with [Public IP insights](#)

13.49.17.73

Summary Tags

18-b) Observe this error that it cannot release the IDs.



Release Elastic IP addresses

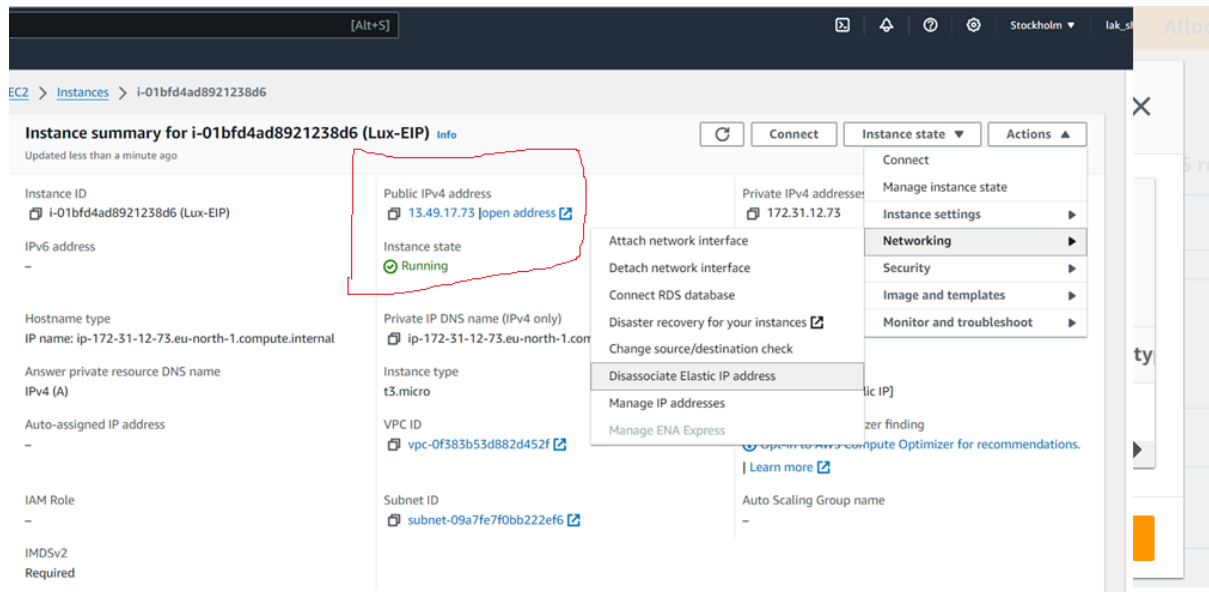
⊗ Cannot be released with association IDs

The following addresses cannot be released because they are associated. Remove the association by using Actions > Disassociate Elastic IP address or, if the resource is associated with a NAT gateway, EC2 instance, or network interface, delete those resources.

Name	IPv4 address	Allocation ID	Association
-	13.49.17.73	eipalloc-0b7bebe0f384c7cd8	eipassoc-05

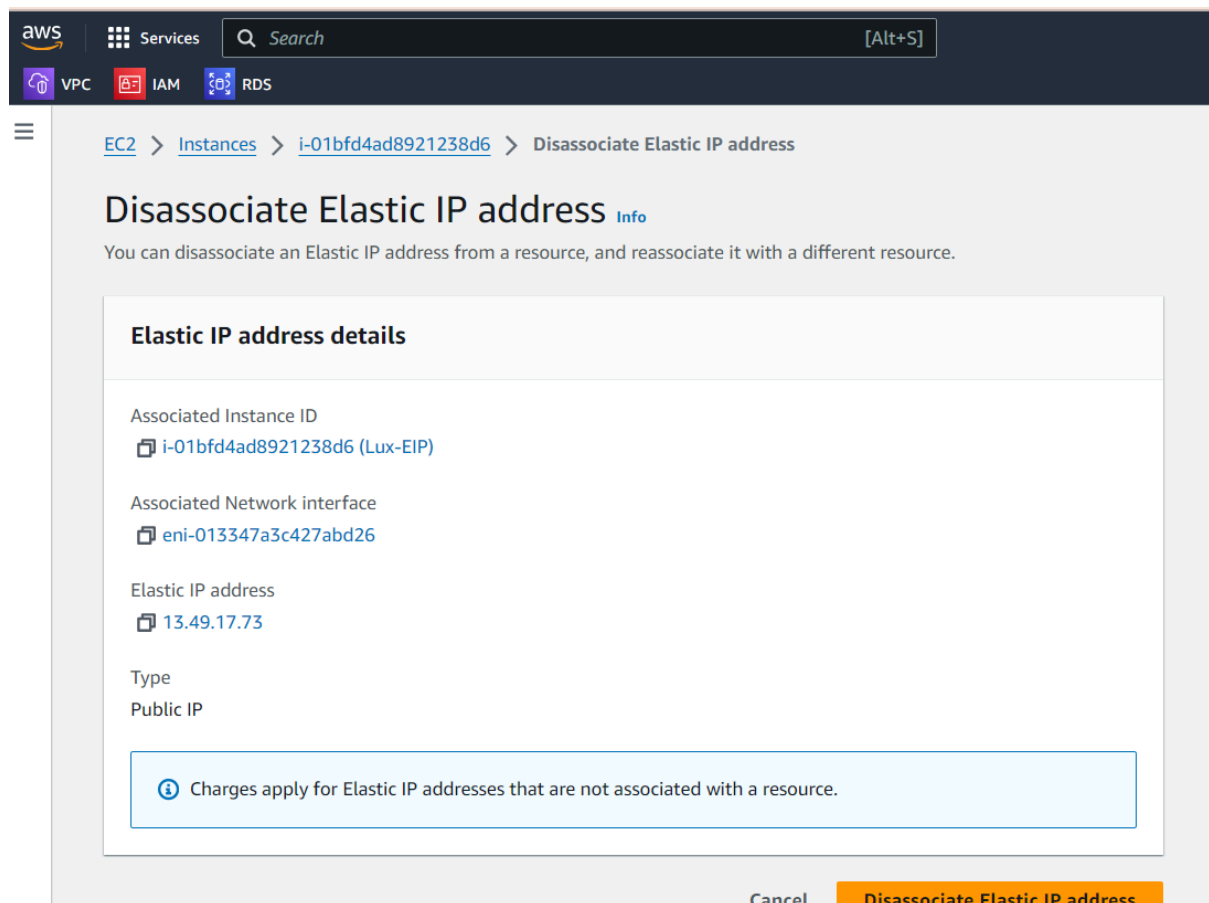
Cancel Release

18-> c) Go to Instance in the navigation pan, and invoke the Instance state -> Networking

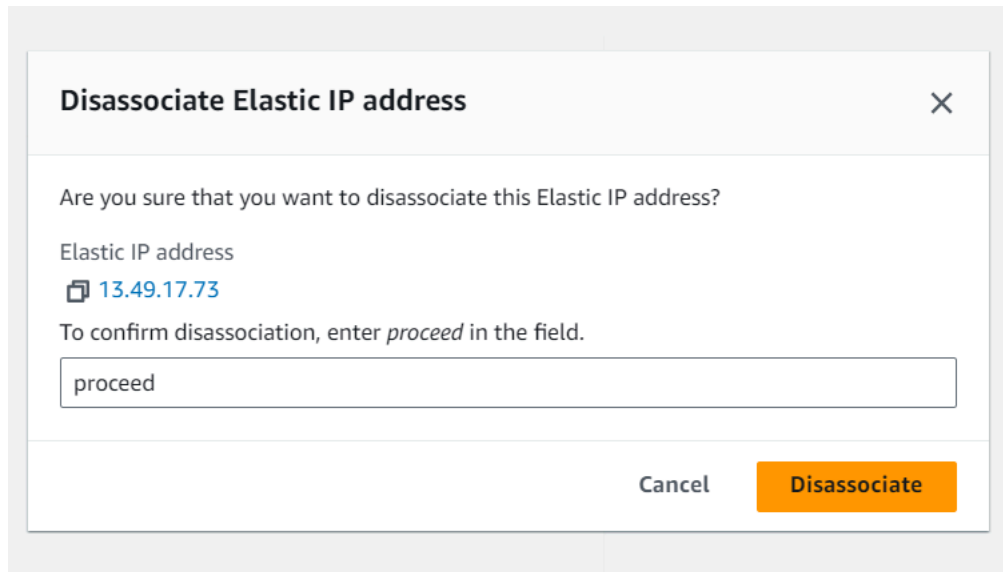


TAKE A SCREENSHOT OF THIS in your CONSOLE AND SAVE IT in your GOOGLE Drive FOR OBSERVATION and to WRITE THIS IN YOUR NOTEBOOK(RECORD)

18-> d) Go to Instance in the navigation pan, and invoke the Instance state -> Networking-> Disassociate Elastic IP address



18-> e) Go to Instance in the navigation pan, and invoke the Instance state
-> Networking-> Disassociate Elastic IP address ->Press Disassociate



The screenshot shows a modal dialog titled "Disassociate Elastic IP address" with a close button (X) in the top right corner. The dialog contains the following text:

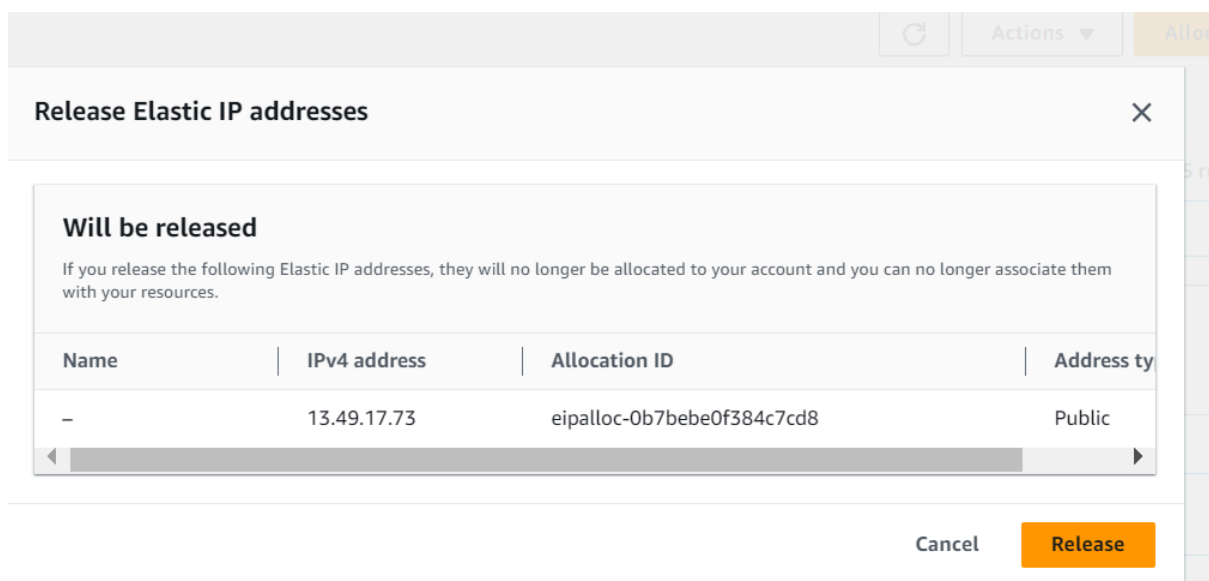
Are you sure that you want to disassociate this Elastic IP address?

Elastic IP address
13.49.17.73

To confirm disassociation, enter *proceed* in the field.

Below the text is a text input field containing the word "proceed". At the bottom right of the dialog are two buttons: "Cancel" and "Disassociate".

18-> f) Release Elastic IP addresses by pressing the “Release” button.



The screenshot shows a modal dialog titled "Release Elastic IP addresses" with a close button (X) in the top right corner. The dialog contains the following text:

Will be released

If you release the following Elastic IP addresses, they will no longer be allocated to your account and you can no longer associate them with your resources.

Name	IPv4 address	Allocation ID	Address type
–	13.49.17.73	eipalloc-0b7bebe0f384c7cd8	Public

Below the table is a horizontal scrollbar. At the bottom right of the dialog are two buttons: "Cancel" and "Release".

19-> Additional task.

Interested to have insights click on the VPC IP Manager to see any “Public IP Insights”

If you find any IP which you don't want to pay for you have to repeat step 18.