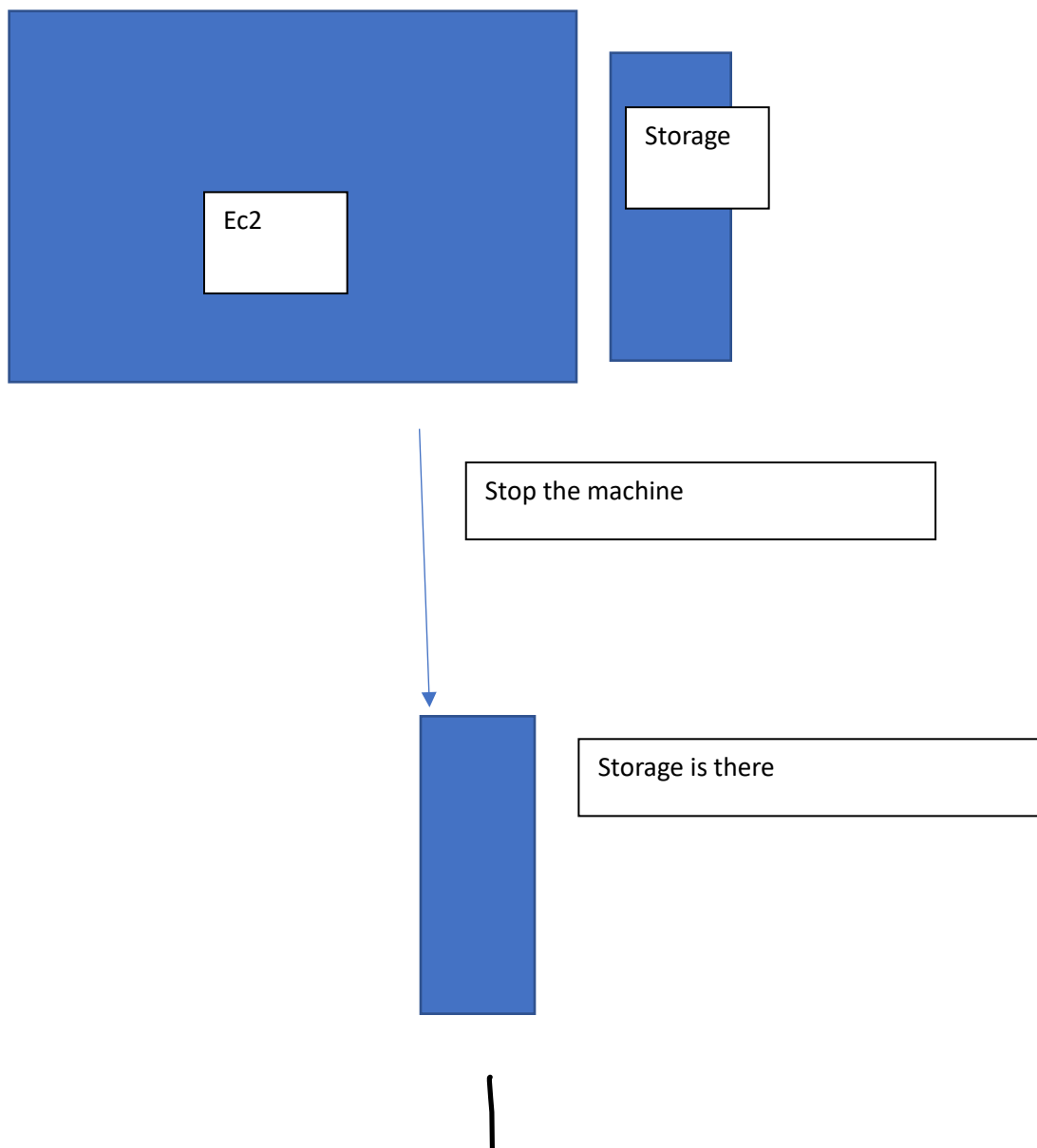


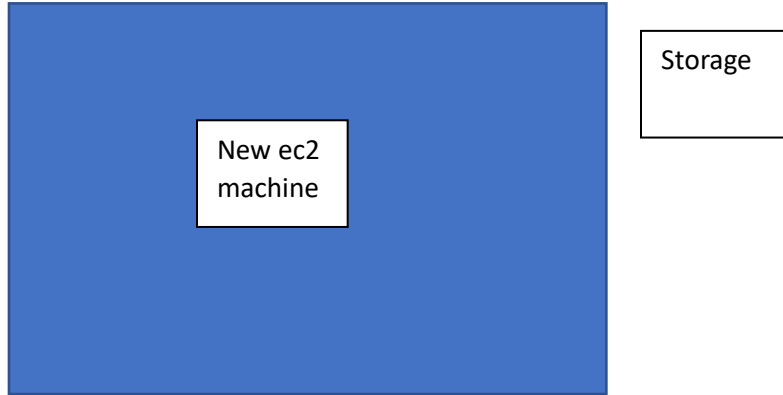
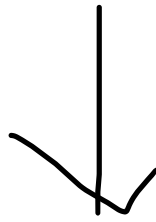
CONCEPT OF ELASTIC IP

IF we restart the machine the public ip changes ...

Or due to any if my machine starts then the public ip of the machine changes

Because when you stop the instance the machine is removed but storage is there...so when you restart the instance the new machine is attached to the instance ..and ip is attached to the machine ...so because of this the reason the public ip of the machine changes





	Name	Instance ID	Instance state	Instance type
<input type="checkbox"/>	replica of linux machine	i-0c20e33402e983720	Terminated	t2.micro
<input checked="" type="checkbox"/>	linux-machine	i-07ea0177aa3a3eab7	Running	t2.micro

Instance: i-07ea0177aa3a3eab7 (linux-machine)

Details	Security	Networking	Storage	Status checks	Monitoring	Tags
▼ Instance summary Info						
Instance ID i-07ea0177aa3a3eab7 (linux-machine)		Public IPv4 address 3.84.23.24 open address		Private IPv4 addresses 172.31.82.176		Public IPv4 DNS
IPv6 address		Instance state				

Find instance by attribute or tag (case-sensitive)

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type
<input checked="" type="checkbox"/>	linux-machine	i-07ea0177aa3a3eab7	Stopped	t2.micro

Instance: i-07ea0177aa3a3eab7 (linux-machine)

Details Security Networking Storage Status checks Monitoring Tags

▼ Instance summary Info

Instance ID i-07ea0177aa3a3eab7 (linux-machine)	Public IPv4 address -	Private IPv4 addresses 172.31.82.176
IPv6 address	Instance state	Public IPv4 DNS

Lets restart the machine

Successfully stopped i-07ea0177aa3a3eab7

Instances (1/1) Info Refresh Connect Instance state ▲ Actions ▼ Launch instances

Find instance by attribute or tag (case-sensitive)

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type
<input checked="" type="checkbox"/>	linux-machine	i-07ea0177aa3a3eab7	Stopped	t2.micro

Start instance

Stop instance

Reboot instance

Hibernate instance

Terminate instance

Instance: i-07ea0177aa3a3eab7 (linux-machine)

Details Security Networking Storage Status checks Monitoring Tags

▼ Instance summary Info

Instance ID i-07ea0177aa3a3eab7 (linux-machine)	Public IPv4 address -	Private IPv4 addresses 172.31.82.176
IPv6 address	Instance state Stopped	Public IPv4 DNS

The screenshot shows the AWS Management Console interface for an instance. At the top, there's a header with 'Instances (1/1)' and an 'Info' link. Below this is a search bar and a table with columns: Name, Instance ID, Instance state, and Instance type. The table contains one entry: 'linux-machine' with ID 'i-07ea0177aa3a3eab7', state 'Running', and type 't2.micro'. Below the table, there's a section for 'Instance: i-07ea0177aa3a3eab7 (linux-machine)' with tabs for Details, Security, Networking, Storage, Status checks, Monitoring, and Tags. The 'Details' tab is active, showing an 'Instance summary' section. In this section, the 'Public IPv4 address' is listed as '3.86.113.226' with a link to 'open address'. This address is circled in black.

Earlier different ip was there and now its different.

Working this problem working in prod env is really difficult because if your ip changes you have to make a lot of changes in the routing ...to avoid this problem we can use the concept of elastic ips

The screenshot shows the AWS Management Console interface with a green notification banner at the top stating 'Successfully started i-07ea0177aa3a3eab7'. The left sidebar contains a navigation menu with categories: Images, Elastic Block Store, Network & Security, and Load Balancing. Under 'Network & Security', the 'Elastic IPs' option is highlighted with a red circle. The main content area shows the same instance details as the previous screenshot, including the public IPv4 address '3.86.113.226'.

Allocate elastic ip

Allocate

[Alt+S] [Icons] N. Virginia Sam

✓ Elastic IP address allocated successfully.
Elastic IP address 35.170.233.67

Associate this Elastic IP address

Elastic IP addresses (1/1)

Filter Elastic IP addresses

Public IPv4 address: 35.170.233.67 X Clear filters

Actions

- View details
- Release Elastic IP addresses
- Associate Elastic IP address
- Disassociate Elastic IP address

<input checked="" type="checkbox"/>	Name	Allocated IPv4 address	Type	
<input checked="" type="checkbox"/>	-	35.170.233.67	Public IP	einallac-0e28h0de1ecb91940

35.170.233.67

Summary Tags

Summary

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

Instance

Q i-07ea0177aa3a3eab7 X ↻

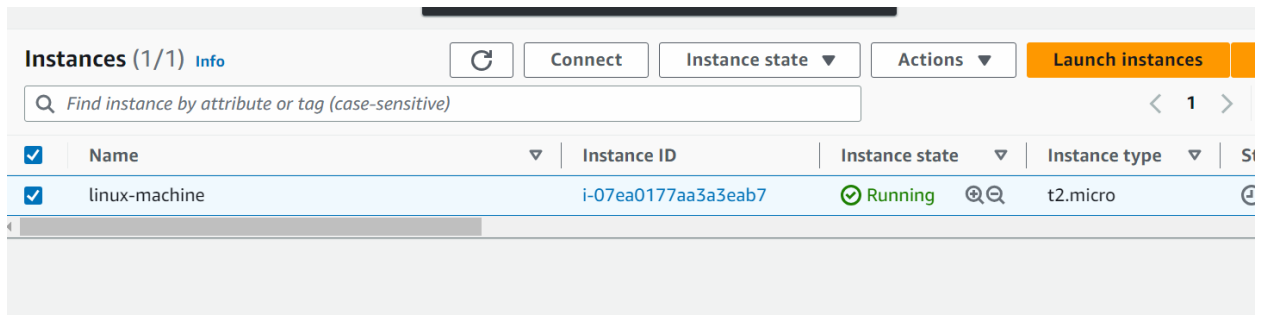
Private IP address
The private IP address with which to associate the Elastic IP address.

Q Choose a private IP address

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

Associate

Refresh your instance



Instances (1/1) [Info](#) Refresh Connect Instance state ▼ Actions ▼ Launch instances

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	...
<input checked="" type="checkbox"/>	linux-machine	i-07ea0177aa3a3eab7	Running	t2.micro	

Instance: i-07ea0177aa3a3eab7 (linux-machine)

[Details](#) | [Security](#) | [Networking](#) | [Storage](#) | [Status checks](#) | [Monitoring](#) | [Tags](#)

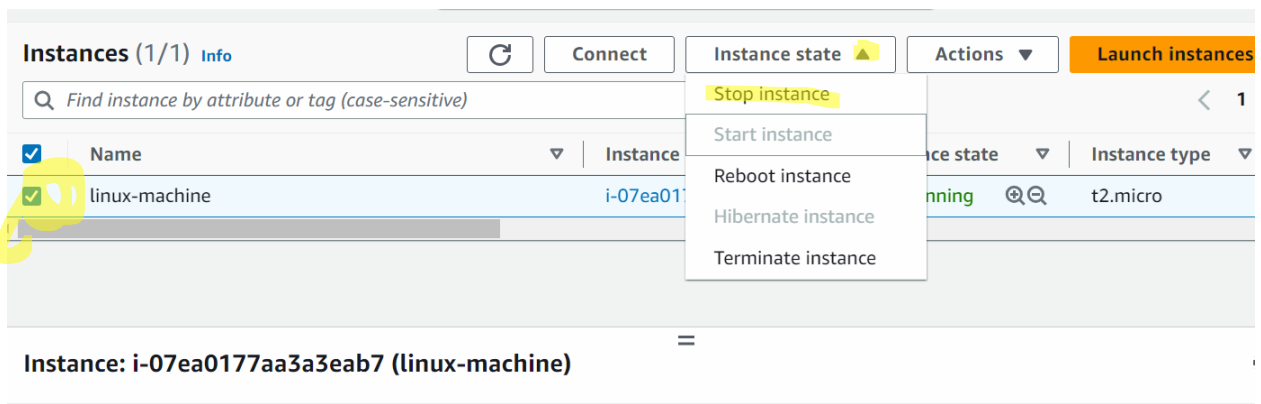
▼ Instance summary [Info](#)

Instance ID
i-07ea0177aa3a3eab7 (linux-machine)

Public IPv4 address
35.170.233.67 [open address](#)

Private IPv4 addresses
172.31.82.176

Now lets stop and start it again you will see the ip s not changes



Instances (1/1) [Info](#) Refresh Connect Instance state ▲ Actions ▼ Launch instances

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	...
<input checked="" type="checkbox"/>	linux-machine	i-07ea0177aa3a3eab7	Running	t2.micro	

- Stop instance
- Start instance
- Reboot instance
- Hibernate instance
- Terminate instance

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type
linux-machine	i-07ea0177aa3a3eab7	Stopped	t2.micro

Instance: i-07ea0177aa3a3eab7 (linux-machine)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

▼ Instance summary Info

Instance ID i-07ea0177aa3a3eab7 (linux-machine)	Public IPv4 address 35.170.233.67 open address	Private IPv4 addresses 172.31.82.176
IPv6 address	Instance state	Public IPv4 DNS

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

Successfully stopped i-07ea0177aa3a3eab7

Notifications 0 0 3 0 0 0

Instances (1/1) Info

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type
linux-machine	i-07ea0177aa3a3eab7	Stopped	t2.micro






Instance: i-07ea0177aa3a3eab7 (linux-machine)



Details | Security | Networking | Storage | Status checks | Monitoring | Tags



▼ Instance summary Info

Instance ID i-07ea0177aa3a3eab7 (linux-machine)	Public IPv4 address 35.170.233.67 open address	Private IPv4 addresses 172.31.82.176
IPv6 address	Instance state Stopped	Public IPv4 DNS ec2-35-170-233-67.compute-





Start

instances (1 / 1)   instance state  actions  

 Find instance by attribute or tag (case-sensitive) 

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type
<input checked="" type="checkbox"/>	linux-machine	i-07ea0177aa3a3eab7	 Running 	t2.micro

Instance: i-07ea0177aa3a3eab7 (linux-machine)

Details	Security	Networking	Storage	Status checks	Monitoring	Tags
▼ Instance summary Info						
Instance ID  i-07ea0177aa3a3eab7 (linux-machine)		Public IPv4 address  35.170.233.67 open address 		Private IPv4 addresses  172.31.82.176		