

Assignment No- 14

Create an Elastic IP for an instance.

1. First we will create an instance. Select ubuntu, key pair, select all the check box in security

Name and tags

Name: tanu28

Application and OS Images (Amazon Machine Image)

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Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type
ami-08456bd84583264d4 (64-bit (x86)) / ami-0c4c709339fa8521a (64-bit (ARM))

Summary

Number of instances: 1

Software image (AMI): Canonical, Ubuntu, 24.04, amd64...read more

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 of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GiB of bandwidth to the internet.

Cancel Launch Instance Preview code

Key pair

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required: key

Create new key pair

Network settings

Network: vpc-0ca08464275ccc3bf

Subnet: No preference (Default subnet in any availability zone)

Auto-assign public IP: Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups)

We'll create a new security group called 'launch-wizard-1' with the following rules:

- ☒ Allow SSH traffic from the internet
- ☒ Allow HTTPS traffic from the internet
- ☒ Allow HTTP traffic from the internet

Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

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Cancel Launch Instance Preview code

2. Now select instance and stop instance. After some time start instance. Note both previous and now public IPv4 address. (before stopping-54.145.252.137, after starting-18.212.176.192).

Instances (1/1)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public
tanu28	i-04bbfcd806e980a7e	Running	t2.micro	Initializing	View alarms +	us-east-1b	ec2-54-145-252-137.co...	54.145

i-04bbfcd806e980a7e (tanu28)

Instance summary

Instance ID: i-04bbfcd806e980a7e

IPv6 address: -

Hostname type: ID name: i-173-31-83-177 or ? internal

Public IPv4 address: 54.145.252.137 | open address

Instance state: Running

Private IP DNS name (IPv4 only): i-173-31-83-177 or ? internal

Private IPv4 addresses: 172.31.83.127

Public IPv4 DNS: ec2-54-145-252-137.compute-1.amazonaws.com | open address

Instances (1/1) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public
tanu28	i-04bbfcd806e980a7e	Running	t2.micro	Initializing	View alarms +	us-east-1b	ec2-18-212-176-192.co...	18.212

i-04bbfcd806e980a7e (tanu28)

Instance summary Info

Instance ID i-04bbfcd806e980a7e	Public IPv4 address 18.212.176.192 open address	Private IPv4 addresses 172.31.83.127
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-18-212-176-192.compute-1.amazonaws.com open address
Hostname type IP name: ip-172-31-83-127.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-83-127.ec2.internal	

3. Go to Elastic IPs and allocate it.

Elastic IP addresses (1)

Public IPv4 address: 54.227.151.6

Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record	Associated instance ID
-	54.227.151.6	Public IP	elipalloc-071d2fc97815c2446	-	-

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

4. Now associate Elastic IP address, select resource type instances.

Associate Elastic IP address

Choose the instance or network interface to associate to this Elastic IP address (54.227.151.6)

Elastic IP address: 54.227.151.6

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

☒ Instance
☐ Network interface

Instance
i-04bbfcd806e980a7e

Private IP address
The private IP address with which to associate the Elastic IP address.
172.31.83.127

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](#)

5. Again now stop and start the instance, no IPv4 address will be changed. (before stopping- 54.227.151.6, after stopping-54.227.151.6)

The screenshot shows the AWS Management Console interface for the 'Instances' page. The instance 'tanu28' (ID: i-04bbfcd806e980a7e) is in the 'Running' state. The instance summary shows the following details:

Property	Value
Instance ID	i-04bbfcd806e980a7e
Instance type	t2.micro
Status check	2/2 checks passed
Availability Zone	us-east-1b
Public IPv4 DNS	ec2-54-227-151-6.com...
Public	54.227

The instance summary also shows the following details:

Property	Value
Public IPv4 address	54.227.151.6 open address
Private IPv4 addresses	172.31.83.127
Public IPv4 DNS	ec2-54-227-151-6.compute-1.amazonaws.com open address
Private IP DNS name (IPv4 only)	ip-172-31-83-127.ec2.internal

```
File Edit View

54.145.252.137 // in pool
18.212.176.192

Elastic
54.227.151.6 //fixed
54.227.151.6
```