

# Ahmed Shawky: Task 1

## 1- Create VPC

**Your VPCs (2)** [Info](#)

Filter VPCs

Actions [Create VPC](#)

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR
-	vpc-54c5123c	Available	172.31.0.0/16	-
my-first-vpc	vpc-0fb7ea0601e7c3b8a	Available	10.0.0.0/16	-

### VPC settings

**Name tag - optional**  
Creates a tag with a key of 'Name' and a value that you specify.

my-vcp

**IPv4 CIDR block** [Info](#)

20.0.0.0/24

**IPv6 CIDR block** [Info](#)

☒ No IPv6 CIDR block

☐ Amazon-provided IPv6 CIDR block

**Tenancy** [Info](#)

Default

### Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key	Value - optional	
Name	my-vcp	Remove

[Add new tag](#)

You can add 49 more tags.

Cancel [Create VPC](#)

## 2- Create 2 subnets (private & public)

Subnets (5) [Info](#)

Filter subnets

	Name	Subnet ID	State	VPC	IPv4 CIDR
<input type="checkbox"/>	-	subnet-19eaff62	Available	vpc-54c5123c	172.31.16.0/20
<input type="checkbox"/>	my-public-subnet	subnet-0e5c3ca0c626db70f	Available	vpc-0fb7ea0601e7c3b8a   my-...	10.0.1.0/24
<input type="checkbox"/>	-	subnet-8c9fc1c1	Available	vpc-54c5123c	172.31.32.0/20
<input type="checkbox"/>	my-private-subnet	subnet-0dc94f279c666bfb	Available	vpc-0fb7ea0601e7c3b8a   my-...	10.0.0.0/24

### Create subnet [Info](#)

**VPC**

VPC ID  
Create subnets in this VPC.

vpc-0b8671a027dd6f01d (my-vcp)

**Associated VPC CIDRs**

IPv4 CIDRs  
20.0.0.0/24

### Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

**Subnet 1 of 1**

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.

public-subnet

The name can be up to 256 characters long.

**Availability Zone** [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.

Europe (Paris) / eu-west-3a

**IPv4 CIDR block** [Info](#)

0.0.0.0/8

**Tags - optional**

**Key** **Value - optional**

Name public-subnet Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

► AWS Command Line Interface command

Cancel Create subnet

### 3- For each subnet create EC2

Create EC2 instance but change the network and subnet in the configuration.

#### Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower p

Number of instances  [Launch into Auto Scaling Group](#)

Purchasing option ☐ Request Spot instances

Network  [Create new VPC](#)

Subnet  [Create new subnet](#)  
251 IP Addresses available

Auto-assign Public IP

Placement group ☐ Add instance to placement group

Capacity Reservation

### 4- Create Internet Gateway for public EC2

Internet gateways (2) [Info](#)

[Create internet gateway](#)

<input type="checkbox"/>	Name	Internet gateway ID	State	VPC ID	Owner
<input type="checkbox"/>	my-getway	igw-0368c462d8af41cdf	Attached	vpc-0fb7ea0601e7c3b8a   my-first-vpc	861699505211
<input type="checkbox"/>	-	igw-05212b6c	Attached	vpc-54c5123c	861699505211

### Create internet gateway [Info](#)

An internet gateway is a virtual router that connects a VPC to the internet. To create a new internet gateway specify the name for the gateway below.

**Internet gateway settings**

**Name tag**  
Creates a tag with a key of 'Name' and a value that you specify.

**Tags - optional**  
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key	Value - optional	
<input type="text" value="Name"/>	<input type="text" value="my-public-gateway"/>	<input type="button" value="Remove"/>
<input type="button" value="Add new tag"/>		

You can add 49 more tags.

igw-09e45f6e5be8dda66 / my-public-gateway

Actions ▲

- Attach to VPC
- Detach from VPC
- Manage tags
- Delete

**Details** Info

Internet gateway ID	State	VPC ID	Owner
igw-09e45f6e5be8dda66	Detached	-	861699505211

**Tags** Manage tags

Search tags

Key	Value
Name	my-public-gateway

## Attach to VPC (igw-09e45f6e5be8dda66) Info

**VPC**

Attach an internet gateway to a VPC to enable the VPC to communicate with the internet. Specify the VPC to attach below.

**Available VPCs**

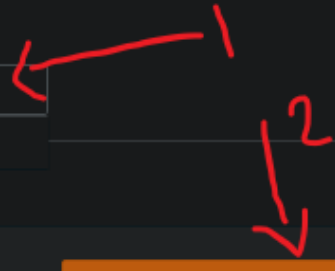
Attach the internet gateway to this VPC.

Select a VPC

vpc-00dccd7468201744d - my-vcp

▶ AWS Command Line Interface command

Cancel Attach internet gateway



5- Create Nat Gateway for Private EC2 and put it inside the public subnet.

**NAT gateways (1/1)** Info

Filter NAT gateways

Actions ▼ Create NAT gateway

Name	NAT gateway ID	Connectivit...	State	State message	Elastic IP address	Private IP ad
my-nat-subnet	nat-07a33a8b901c9c184	Public	Available	-	13.37.122.11	10.0.1.27

# Create NAT gateway [Info](#)

A highly available, managed Network Address Translation (NAT) service that instances in private subnets can use to connect to services in other VPCs, on-premises networks, or the internet.

## NAT gateway settings

### Name - *optional*

Create a tag with a key of 'Name' and a value that you specify.

private-gateway

The name can be up to 256 characters long.

### Subnet

Select a subnet in which to create the NAT gateway.

subnet-01e7f2bb80b0b25cd (public-subnet)

### Connectivity type

Select a connectivity type for the NAT gateway.

☒ Public

☐ Private

### Elastic IP allocation ID [Info](#)

Assign an Elastic IP address to the NAT gateway.

eipalloc-00ea654d141b512d5

Allocate Elastic IP

## Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

### Key

Q Name

### Value - *optional*

Q private-gateway

Remove

Add new tag

You can add 49 more tags.

Cancel

Create NAT gateway

## 6- Create router to manage traffic

Route tables (4) [Info](#)

[Create route table](#)

	Name	Route table ID	Explicit subnet associat...	Edge associations	Main	VPC
<input type="checkbox"/>	-	rtb-0958e67c811e08ade	-	-	Yes	vpc-0fb7ea0601e7c3b
<input type="checkbox"/>	my-router	rtb-0c12a4891addbd585	-	-	No	vpc-0fb7ea0601e7c3b
<input type="checkbox"/>	-	rtb-bb3397d3	-	-	Yes	vpc-54c5123c

### Create route table [Info](#)

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

#### Route table settings

##### Name - optional

Create a tag with a key of 'Name' and a value that you specify.

test-router

##### VPC

The VPC to use for this route table.

vpc-00dccd7468201744d (my-vcp)

#### Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

##### Key

Name

##### Value - optional

test-router

Remove

Add new tag

You can add 49 more tags.

Cancel

Create route table

### Edit routes

Destination	Target	Status	Propagated
20.0.0.0/16	local	Active	No
0.0.0.0/0	igw-09e45f6e5be8dda66	-	No
0.0.0.0/8	nat-09cf2dde31825702a	-	No

[Add route](#)

[Cancel](#) [Preview](#) [Save changes](#)