

First go to VPC menu Or search for it in bar

The screenshot shows the AWS Management Console with the VPC Management Console selected. The search bar at the top is highlighted with a red box. In the 'Recently visited' section, 'VPC' is listed and highlighted with a red box. The main pane displays a grid of services under 'All services', including Compute, Developer Tools, Machine Learning, AWS Cost Management, Containers, Customer Enablement, Front-end Web & Mobile, Storage, Robotics, AR & VR, Blockchain, Application Integration, and Site-to-Site VPN Connections.

Click on Your VPCs Menu

The screenshot shows the AWS Management Console with the VPC Dashboard selected. The left sidebar shows various VPC-related options, with 'Your VPCs' highlighted with a red box. The main pane displays the 'Resources by Region' section, showing counts for VPCs, Subnets, Route Tables, Internet Gateways, Egress Only Internet Gateways, Carrier Gateways, DHCP Options Sets, Elastic IPs, Managed Prefix Lists, Endpoints, Endpoint Services, and NAT Gateways across the Oregon region. To the right, there are sections for 'Service Health', 'Settings', 'Additional Information', and 'Transit Gateway Network Manager'.

By default you will have one VPC created. Click on Create VPC Button

The screenshot shows the AWS VPC Management Console. On the left, there's a sidebar with various VPC-related options like Subnets, Route Tables, Internet Gateways, etc. The main area displays a table titled 'Your VPCs (1)'. The table has columns for Name, VPC ID, State, IPv4 CIDR, and IPv6 CIDR. One row is listed with 'vpc-a766ccc1' as the VPC ID, 'Available' as the state, and '172.31.0.0/16' as the IPv4 CIDR. At the top right of the table, there's a 'Create VPC' button, which is highlighted with a red box.

Write VPC name and then write CIDR then hit Create VPC button

This screenshot shows the 'Create VPC' wizard. It has several input fields: 'Name tag - optional' with the value 'AssignmentVPC', 'IPv4 CIDR block' with the value '10.0.0.0/20', and a 'Tenancy' dropdown set to 'Default'. Below these, there's a 'Tags' section where a tag 'Name: AssignmentVPC' is added. A large red arrow points from the 'Create VPC' button at the bottom right towards the 'Tags' section.

Now VPC is created. Now go to Subnets Menu

Your VPCs (2) Info

| Name            | VPC ID                | State     | IPv4 CIDR     | IPv6 CIDR |
|-----------------|-----------------------|-----------|---------------|-----------|
| AssignmentVPC ✓ | vpc-0e6ca66620f0b82fa | Available | 10.0.0.0/20   | -         |
| -               | vpc-a766ccc1          | Available | 172.31.0.0/16 | -         |

Subnets

By default there are two subnets. Click on Create subnet button to create a public subnet

Subnets (2) Info

| Name | Subnet ID       | State     | VPC          | IPv4 CIDR      | IPv6 CIDR |
|------|-----------------|-----------|--------------|----------------|-----------|
| -    | subnet-40c5a026 | Available | vpc-a766ccc1 | 172.31.16.0/20 | -         |
| -    | subnet-bf68d9e5 | Available | vpc-a766ccc1 | 172.31.0.0/20  | -         |

Create subnet

First choose VPC ID (Which we created it before). Then name the new subnet

VPC Management Console > Services > VPC > Subnets > Create subnet

Create subnet

VPC

VPC ID: vpc-0e6ca66620f0b82fa (AssignmentVPC)

Associated VPC CIDRs: 10.0.0.0/20

Subnet settings

Subnet 1 of 1

Subnet name: PublicSubnet

Availability Zone: US West (N. California) / us-west-1a

IPv4 CIDR: 10.0.0.0/20

Choose availability zone & write CIDR then press on Create subnet

VPC Management Console > Services > VPC > Subnets > Create subnet

Subnet 1 of 1

Subnet name: PublicSubnet

Availability Zone: US West (N. California) / us-west-1a

IPv4 CIDR block: 10.0.0.0/27

Add new tag

Add new subnet

Create subnet

### Same steps are used to create the private subnet

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

Availability Zone Info  
Choose the region and availability zone you want or let Amazon choose one for you.  
**US West (N. California) / us-west-1c**

IPv4 CIDR block Info  
**10.0.1.0/26**

Tags - optional

| Key         | Value - optional     |
|-------------|----------------------|
| <b>Name</b> | <b>PrivateSubnet</b> |

Add new tag  
You can add 49 more tags.

Remove  
Add new subnet

Create subnet

Now both private & public subnets are created and in available state

You have successfully created 1 subnet: subnet-085b789a530e8f950

Subnets (4) Info

| Name                 | Subnet ID                | State     | VPC                             | IPv4 CIDR      | IPv6 CIDR |
|----------------------|--------------------------|-----------|---------------------------------|----------------|-----------|
| <b>PrivateSubnet</b> | subnet-085b789a530e8f950 | Available | vpc-0e6ca66620f0b82fa   Assi... | 10.0.1.0/26    | -         |
| -                    | subnet-40c5a026          | Available | vpc-a766ccc1                    | 172.31.16.0/20 | -         |
| <b>PublicSubnet</b>  | subnet-bf68d9e5          | Available | vpc-a766ccc1                    | 172.31.0.0/20  | -         |
|                      | subnet-09435d973492761fc | Available | vpc-0e6ca66620f0b82fa   Assi... | 10.0.0.0/27    | -         |

Select a subnet

Go to EC2 menu and then to Instances menu. Press on launch instance button

The screenshot shows the AWS Management Console interface for the EC2 service. On the left, there's a navigation sidebar with various options like EC2 Dashboard, Events, Tags, Limits, Instances, Images, Elastic Block Store, and Network & Security. The main area is titled 'Instances' and shows a table with columns for Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, and Pulse. A message at the top says 'You do not have any instances in this region'. At the top right of the main area, there's a 'Launch Instances' button, which is highlighted with a red box. Below the main table, there's a modal window titled 'Select an instance above'.

### Select Amazon Linux 2 AMI

The screenshot shows the 'Launch instance wizard' step 1: 'Choose an AMI'. The wizard has 7 steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, 7. Review. The 'Amazon Linux 2 AMI (HVM), SSD Volume Type' is selected. This AMI is described as 'Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras. This AMI is the successor of the Amazon Linux AMI that is approaching end of life on December 31, 2020 and has been removed from this wizard.' Below the description, it shows 'Root device type: ebs', 'Virtualization type: hvm', and 'ENAvated: Yes'. There are three other AMI options listed: 'Red Hat Enterprise Linux 8 (HVM), SSD Volume Type' and 'SUSE Linux Enterprise Server 15 SP2 (HVM), SSD Volume Type', both of which have their 'Select' buttons highlighted with red boxes. Each option also has a radio button for '64-bit (x86)' or '64-bit (Arm)'.

Select t2.micro option (Free tier eligible) then press next

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance families ▾ Current generation ▾ Show/hide Columns

Currently selected: t2.micro (- ECUs, 1 vCPUs, 2.5 GHz, -, 1 GiB memory, EBS only)

| Family | Type                                  | vCPUs | Memory (GiB) | Instance Storage (GB) | EBS-Optimized Available | Network Performance | IPv6 Support |
|--------|---------------------------------------|-------|--------------|-----------------------|-------------------------|---------------------|--------------|
| t2     | t2.nano                               | 1     | 0.5          | EBS only              | -                       | Low to Moderate     | Yes          |
| t2     | <b>t2.micro</b><br>Free tier eligible | 1     | 1            | EBS only              | -                       | Low to Moderate     | Yes          |
| t2     | t2.small                              | 1     | 2            | EBS only              | -                       | Low to Moderate     | Yes          |
| t2     | t2.medium                             | 2     | 4            | EBS only              | -                       | Low to Moderate     | Yes          |
| t2     | t2.large                              | 2     | 8            | EBS only              | -                       | Low to Moderate     | Yes          |
| t2     | t2.xlarge                             | 4     | 16           | EBS only              | -                       | Moderate            | Yes          |
| t2     | t2.2xlarge                            | 8     | 32           | EBS only              | -                       | Moderate            | Yes          |
| t3     | t3.nano                               | 2     | 0.5          | EBS only              | Yes                     | Up to 5 Gigabit     | Yes          |
| t3     | t3.micro                              | 2     | 1            | EBS only              | Yes                     | Up to 5 Gigabit     | Yes          |

8:05 PM 9/17/2021

Cancel Previous Review and Launch Next: Configure Instance Details

Feedback English (US) ▾ © 2008 - 2021, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use Cookie preferences

Now choose VPC which we created previously and then choose private subnet, so we can create an instance inside our private subnet then press on next button

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 pricing, assign an access management role to the instance, and more.

Number of instances: 1 Launch into Auto Scaling Group

Purchasing option: Request Spot instances

Network: vpc-0e6ca66620f0b82fa | AssignmentVPC Create new VPC

Subnet: subnet-085b789a530e8f950 | PrivateSubnet | us-west-2 Create new subnet  
59 IP Addresses available

Auto-assign Public IP: Use subnet setting (Disable)

Placement group: Add instance to placement group

Capacity Reservation: Open

Domain join directory: No directory Create new directory

IAM role: None Create new IAM role

Shutdown behavior: Stop

Stop - Hibernate behavior: Enable hibernation as an additional stop behavior

Enable termination protection: Protect against accidental termination

8:07 PM 9/17/2021

Cancel Previous Review and Launch Next: Add Storage

Feedback English (US) ▾ © 2008 - 2021, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use Cookie preferences

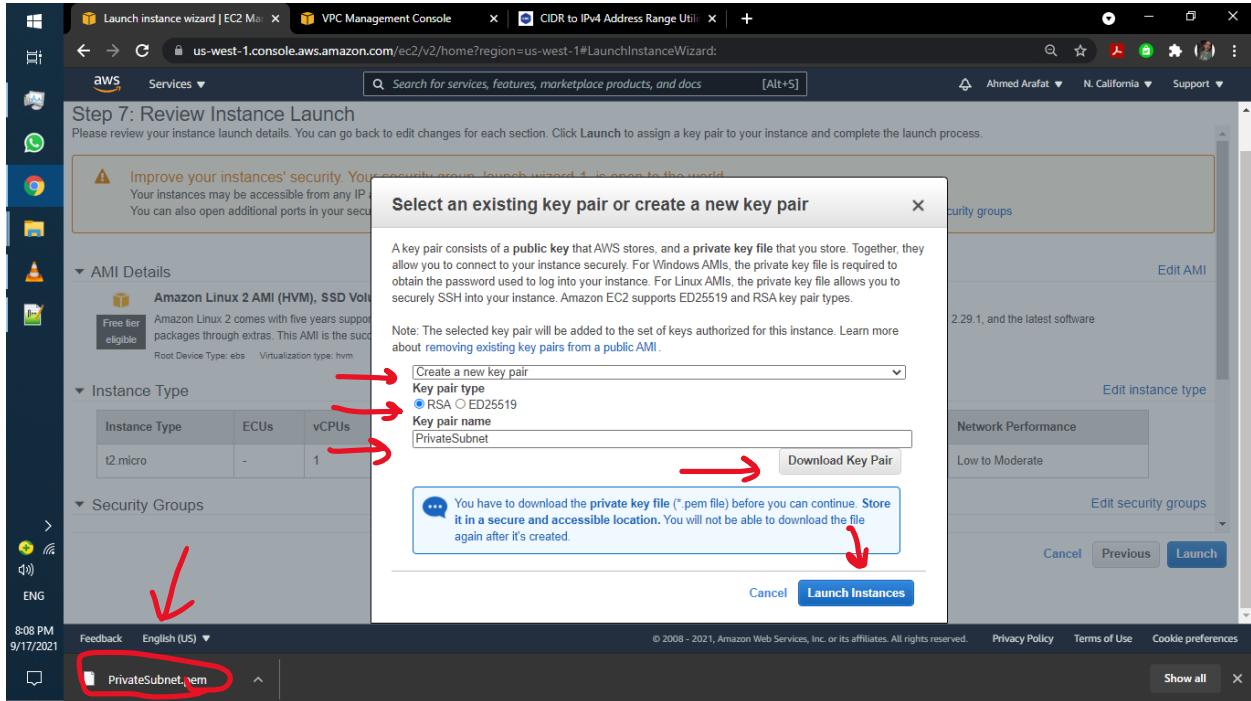
## Add a tag to the Instance

The screenshot shows the AWS Launch Instance Wizard at Step 5: Add Tags. It displays a table where a tag named "PrivateSubnetEC2" has been added with the value "PrivateSubnetEC2". The tag is applied to Instances, Volumes, and Network Interfaces. Below the table is a button labeled "Add another tag". At the bottom right are "Cancel", "Previous", "Review and Launch" (which is highlighted in blue), and "Next: Configure Security Group". A red arrow points to the "Review and Launch" button.

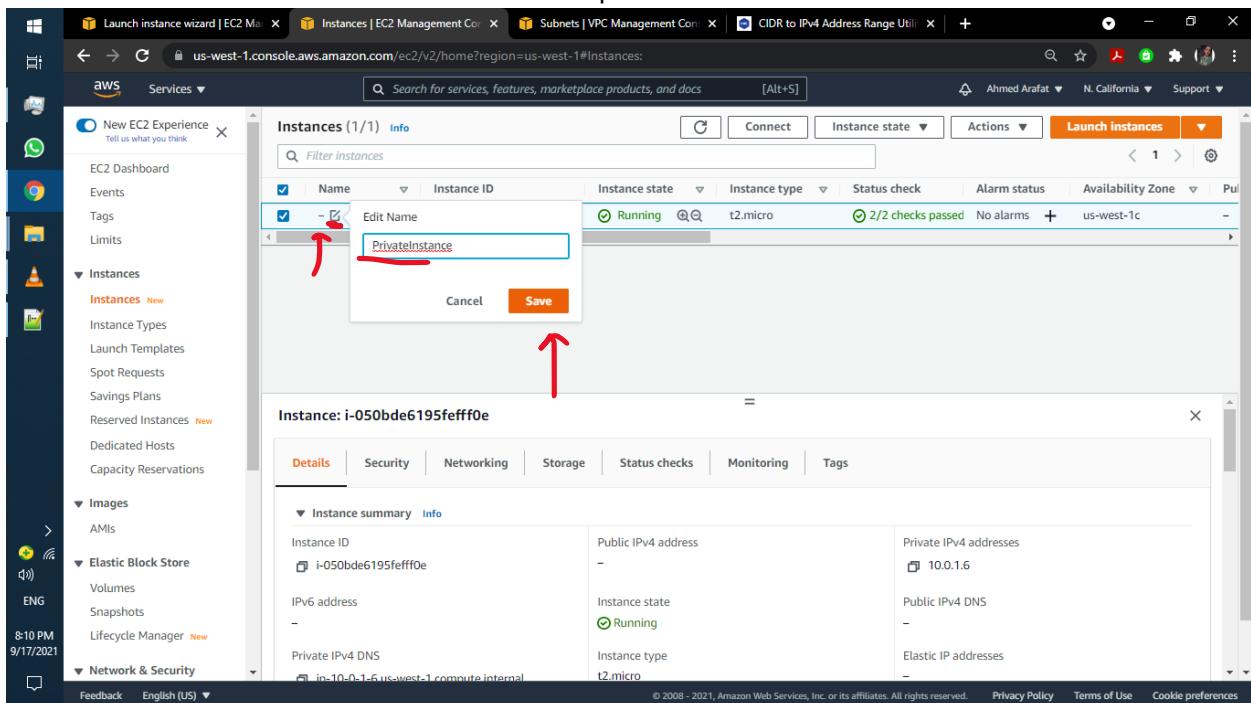
as it's a private subnet we will only need SSH. Press next button

The screenshot shows the AWS Launch Instance Wizard at Step 6: Configure Security Group. It shows a configuration for a new security group named "launch-wizard-1" with a single rule allowing SSH traffic from 0.0.0.0/0. A warning message states: "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." At the bottom right are "Cancel", "Previous", "Review and Launch" (highlighted in blue), and "Next: Review". A red arrow points to the "Review and Launch" button.

Choose create a new key pair then RSA option and write key pair name then download key pair then hit Launch Instance Button



Instance inside private subnet is created successfully. Then Edit name of instance and give it a descriptive name



Now private instance is in running state , go again to subnet menu

The screenshot shows the AWS EC2 Instances page. A red arrow points to the 'Instance state' column for the 'PrivateInstance' row, which is highlighted in blue and shows 'Running'. The instance ID is 'i-050bde6195fefff0e'. Other columns include 'Name' (PrivateInstance), 'Instance type' (t2.micro), 'Status check' (2/2 checks passed), and 'Availability Zone' (us-west-1c). The left sidebar shows navigation options like EC2 Dashboard, Instances, Images, and Network & Security.

In subnet menu right click on public subnet to modify auto-assign IP settings

The screenshot shows the AWS VPC Subnets page. A red arrow points to a context menu on the 'PublicSubnet' row, specifically the 'Modify auto-assign IP settings' option. The subnet ID is 'subnet-09435d973492761f6'. The left sidebar shows navigation options like VPC Dashboard, Subnets, and Route Tables.

Enable auto-assign public IPv4 address then hit Save button

The screenshot shows the AWS VPC Management Console. The URL is [us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#ModifyAutoAssignIpSettings:subnetId=subnet-09435d973492761f6](https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#ModifyAutoAssignIpSettings:subnetId=subnet-09435d973492761f6). The page title is "Modify auto-assign IP settings". It shows a "Settings" section with a "Subnet ID" of "subnet-09435d973492761f6". Under "Auto-assign IPv4", the "Enable auto-assign public IPv4 address" checkbox is checked (indicated by a red arrow). Below it, "Auto-assign customer-owned IPv4 address" is listed with a note: "Option disabled because no customer owned pools found." At the bottom are "Cancel" and "Save" buttons, with a red arrow pointing to the "Save" button.

Now go again to EC2 then to Instances menu and click on launch Instance to create public instance

The screenshot shows the AWS EC2 Management Console. The URL is [us-west-1.console.aws.amazon.com/ec2/v2/home?region=us-west-1#Instances:](https://us-west-1.console.aws.amazon.com/ec2/v2/home?region=us-west-1#Instances:). The left sidebar shows "Instances" selected. The main pane displays "Instances (1) info" with one instance listed: "i-050bde6195feffff0e" (Running, t2.micro, us-west-1c). In the top right of the main pane, there is a "Actions" dropdown menu with a "Launch Instances" option. This "Launch Instances" option is highlighted with a red box. Below the main pane, a modal window titled "Select an instance above" is open, asking "Select an instance above".

Again choose Amazon Linux 2 AMI then hit Select button

The screenshot shows the 'Choose an AMI' step of the AWS Launch Instance Wizard. The 'Amazon Linux 2 (HVM, SSD Volume Type)' option is selected and highlighted with a red box. The 'Select' button next to it is also highlighted with a red box.

Choose t2.micro option (for free accounts) then hit Next Button

The screenshot shows the 'Choose an Instance Type' step of the AWS Launch Instance Wizard. The 't2.micro' instance type is selected and highlighted with a red box. A red arrow points to the 'Review and Launch' button at the bottom right.

Choose VPC and then public subnet (Auto-assign public IP will be enabled by default). Then hit next button

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 pricing, assign an access management role to the instance, and more.

Number of instances: 1

Purchasing option:  Request Spot instances

Network: vpc-0e6cae6662f0fb82fa | AssignmentVPC

Subnet: subnet-09435d973492761f6 | PublicSubnet | us-west-1   
27 IP Addresses available

Auto-assign Public IP: Use subnet setting (Enable)

Placement group:  Add instance to placement group

Capacity Reservation: Open

Domain join directory: No directory

IAM role: None

Shutdown behavior: Stop

Stop - Hibernate behavior:  Enable hibernation as an additional stop behavior

Enable termination protection:  Protect against accidental termination

Here add HTTP so users can access this public instance then hit Review and Launch

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group:  Create a new security group  
 Select an existing security group

Security group name: launch-wizard-2

Description: launch-wizard-2 created 2021-09-17T20:11:43.513+02:00

| Type | Protocol | Port Range | Source           | Description                |
|------|----------|------------|------------------|----------------------------|
| SSH  | TCP      | 22         | Custom 0.0.0.0/0 | e.g. SSH for Admin Desktop |
| HTTP | TCP      | 80         | Custom 0.0.0.0/0 | e.g. SSH for Admin Desktop |

**Warning**  
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.

## Review data and then hit Launch button

**Step 7: Review Instance Launch**

Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

**AMI Details**

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-011996ff98de391d1

**Instance Type**

| Instance Type | ECUs | vCPUs | Memory (GiB) | Instance Storage (GB) | EBS-Optimized Available | Network Performance |
|---------------|------|-------|--------------|-----------------------|-------------------------|---------------------|
| t2.micro      | -    | 1     | 1            | EBS only              | -                       | Low to Moderate     |

**Security Groups**

Security group name: launch-wizard-2  
Description: launch-wizard-2 created 2021-09-17T20:11:43.513+02:00

**Launch**

Again Choose create a new key pair then RSA option and write key pair name then download key pair then hit Launch Instance Button

**Select an existing key pair or create a new key pair**

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance. Amazon EC2 supports ED25519 and RSA key pair types.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.

Create a new key pair

RSA  ED25519

Key pair name: PublicSubnet

Download Key Pair

You have to download the private key file (\*.pem file) before you can continue. Store it in a secure and accessible location. You will not be able to download the file again after it's created.

**Launch Instances**

Feedback English (US) 8:12 PM 9/17/2021 PublicSubnet.pem Show all

## New instance is in pending state

The screenshot shows the AWS EC2 Instances page with two instances listed:

| Name            | Instance ID          | Instance state | Instance type | Status check      | Alarm status | Availability Zone |
|-----------------|----------------------|----------------|---------------|-------------------|--------------|-------------------|
| PrivateInstance | i-050bde6195feffff0e | Running        | t2.micro      | 2/2 checks passed | No alarms    | us-west-1c        |
| -               | i-025a40c97b8c53b34  | Pending        | t2.micro      | -                 | No alarms    | us-west-1a        |

A red arrow points to the "Pending" status of the second instance.

Now both public instance and private instance are in running state

The screenshot shows the AWS EC2 Instances page with both instances now in the "Running" state:

| Name            | Instance ID          | Instance state | Instance type | Status check      | Alarm status | Availability Zone |
|-----------------|----------------------|----------------|---------------|-------------------|--------------|-------------------|
| -               | i-025a40c97b8c53b34  | Running        | t2.micro      | 2/2 checks passed | No alarms    | us-west-1a        |
| PrivateInstance | i-050bde6195feffff0e | Running        | t2.micro      | 2/2 checks passed | No alarms    | us-west-1c        |

A red box highlights the "Running" status of both instances, and a red arrow points to the status of the second instance.

Instance inside public subnet is created successfully. Then Edit name of instance and give it a descriptive name

The screenshot shows the AWS EC2 Instances page. In the center, a modal dialog titled 'Instances (1/2) Info' is open, showing a table with one row. The first column is 'Name' with a dropdown menu open, showing 'Edit Name' selected. The second column is 'Instance ID' with the value 'i-025a40c97b8c53b34'. The third column is 'Instance state' with the value 'Running'. The fourth column is 'Instance type' with the value 't2.micro'. The fifth column is 'Status check' with the value '2/2 checks passed'. The sixth column is 'Alarm status' with the value 'No alarms'. The seventh column is 'Availability Zone' with the value 'us-west-1a'. At the bottom of the dialog are 'Cancel' and 'Save' buttons, with 'Save' highlighted by a red arrow. Below the dialog, another window titled 'Instance: i-025a40c97b8c53b34' is open, showing detailed information about the instance.

Now both public instance and private instance are in running state. Go to VPC menu again

The screenshot shows the AWS EC2 Instances page again. The table now has two rows. The first row is for 'Publicinstance' (Instance ID: i-025a40c97b8c53b34) and the second row is for 'Privateinstance' (Instance ID: i-050bde6195feff0e). Both instances are shown as 'Running' in the 'Status check' column, indicated by green circles with checkmarks. The rest of the columns show the same information as before: Instance type (t2.micro), Availability Zone (us-west-1a for Publicinstance, us-west-1c for Privateinstance), and Alarm status (No alarms). Below the table, the 'Instance: i-025a40c97b8c53b34' details window is still visible.

## In VPC menu choose Route Tables menu

Subnets (1/4) Info

| Name          | Subnet ID                | State     | VPC                             | IPv4 CIDR      | IPv6 CIDR |
|---------------|--------------------------|-----------|---------------------------------|----------------|-----------|
| PrivateSubnet | subnet-085b789a530e8f950 | Available | vpc-0e6ca66620f0b82fa   Assi... | 10.0.1.0/26    | -         |
| -             | subnet-40c5a026          | Available | vpc-a766ccc1                    | 172.31.16.0/20 | -         |
| -             | subnet-bf6d9e5           | Available | vpc-a766ccc1                    | 172.31.0.0/20  | -         |
| PublicSubnet  | subnet-09435d973492761f6 | Available | vpc-0e6ca66620f0b82fa   Assi... | 10.0.0.0/27    | -         |

subnet-085b789a530e8f950 / PrivateSubnet

**Details** Flow logs Route table Network ACL CIDR reservations Sharing Tags

**Details**

|                          |  |                   |                      |
|--------------------------|--|-------------------|----------------------|
| Subnet ID                | Subnet ARN   | State             | IPv4 CIDR            |
| subnet-085b789a530e8f950 | arn:aws:ec2:us-west-1:855878568422:subnet/subnet-085b789a530e8f950 | Available         | 10.0.1.0/26          |
| Available IPv4 addresses |  | Availability Zone | Availability Zone ID |

Click on Create route table button to create 2 routes one for public subnet and other for private subnet

Route tables (2) Info

| Name | Route table ID        | Explicit subnet associat... | Edge associations | Main | VPC                             |
|------|-----------------------|-----------------------------|-------------------|------|---------------------------------|
| -    | rtb-068dfc408ca65a352 | -                           | -                 | Yes  | vpc-0e6ca66620f0b82fa   Assi... |
| -    | rtb-070f2e61          | -                           | -                 | Yes  | vpc-a766ccc1                    |

Select a route table

Name Route for public subnet and select VPC and then hit Create route table button

Route table settings

Name - optional  
RouterForPublicSubnet

VPC  
vpc-0e6ca66620f0b82fa (AssignmentVPC)

Tags

Key Value - optional  
Name RouterForPublicSubnet Remove

Add new tag

Create route table

Now route is created successfully. Now create another one for private subnet

Route table rtb-00bb0506d1c5abcf4 | RouterForPublicSubnet was created successfully.

rtb-00bb0506d1c5abcf4 / RouterForPublicSubnet

Actions

Details Info

|  |                          |                                   |                        |
|--|--------------------------|-----------------------------------|------------------------|
| Route table ID<br>rtb-00bb0506d1c5abcf4      | Main<br>No               | Explicit subnet associations<br>- | Edge associations<br>- |
| VPC<br>vpc-0e6ca66620f0b82fa   AssignmentVPC | Owner ID<br>855878568422 |                                   |                        |

Routes Subnet associations Edge associations Route propagation Tags

Routes (1)

Edit routes

Name Route for private subnet and select VPC and then hit Create route table button

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  
RouterForPrivateSubnet

VPC  
vpc-0e6ca66620f0b82fa (AssignmentVPC)

**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 RouterForPrivateSubnet Remove

Add new tag You can add 49 more tags.

Cancel **Create route table**

Now both routes are created. Go to Internet Gateways menu to create a gateway so subnets can access internet

New VPC Experience Tell us what you think

VPC Dashboard

EC2 Global View New

Filter by VPC: Select a VPC

**VIRTUAL PRIVATE CLOUD**

Your VPCs

Subnets

**Route Tables New** 1

Internet Gateways 1

Egress Only Internet Gateways

DHCP Options Sets

Elastic IPs

Managed Prefix Lists

Endpoints

Endpoint Services New

NAT Gateways

Peering Connections New

Feedback English (US) ▾

Route tables (4) Info

Filter route tables

| Name                   | Route table ID        | Explicit subnet associations | Edge associations | Main | VPC                   |
|------------------------|-----------------------|------------------------------|-------------------|------|-----------------------|
| RouterForPrivateSubnet | rtb-06fc7e57706478719 | -                            | -                 | No   | vpc-0e6ca66620f0b82fa |
| -                      | rtb-068dfc408ca65a352 | -                            | -                 | Yes  | vpc-0e6ca66620f0b82fa |
| -                      | rtb-070f2e61          | -                            | -                 | Yes  | vpc-a766ccc1          |
| RouterForPublicSubnet  | rtb-00bb0506d1c5abcf4 | -                            | -                 | No   | vpc-0e6ca66620f0b82fa |

Select a route table

© 2008 - 2021, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use Cookie preferences

Press on create internet gateway button

The screenshot shows the AWS VPC Internet Gateways page. On the left sidebar, under 'VIRTUAL PRIVATE CLOUD', 'Internet Gateways' is selected. The main area displays a table with one row for an internet gateway named 'igw-c5c962a2'. The 'Actions' column for this row contains a button labeled 'Create Internet gateway', which is highlighted with a red box. The URL in the browser is [us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#igws](https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#igws).

Name new internet gateway and then press Create internet gateway button

The screenshot shows the 'Create internet gateway' wizard. The first step, 'Internet gateway settings', has a 'Name tag' input field containing the value 'InternetGatewayForPublicSubnet', which is highlighted with a red box. Below this, the 'Tags - optional' section shows a single tag being added, with the 'Key' set to 'Name' and the 'Value' set to 'InternetGatewayForPublicSubnet'. A red arrow points to the 'Value' input field. At the bottom of the screen, there is a 'Create Internet gateway' button. The URL in the browser is [us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#CreateInternetGateway](https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#CreateInternetGateway).

## For public route table click on Route table ID

The screenshot shows the AWS VPC Management Console with the 'Route tables' page open. The left sidebar shows 'Route Tables New' under 'VIRTUAL PRIVATE CLOUD'. The main area displays a table with four rows. The first row is 'RouterForPrivateSubnet' with Route table ID 'rtb-06fc7e57706478719'. The second row has three entries: 'rtb-068dfc408ca65a352', 'rtb-070f2e61', and 'rtb-00bb0506d1c5abcf4'. The third row is 'RouterForPublicSubnet' with Route table ID 'rtb-00bb0506d1c5abcf4'. A red arrow points from the top-left to the 'Route table ID' column header. Another red arrow points to the fourth row's 'Route table ID' cell.

Press Edit routes button to be able to connect route of public subnet with internet gateway

The screenshot shows the AWS VPC Management Console with the 'RouteTableDetails' page open, specifically for the route table with ID 'rtb-00bb0506d1c5abcf4'. The left sidebar shows 'Route Tables New'. The main area has a 'Details' section with basic information like Route table ID, Main status, VPC, and Owner ID. Below it is a 'Routes' section with a table showing one route entry: Destination '10.0.0.0/20', Target 'local', Status 'Active', and Propagated status 'No'. A red box highlights the 'Edit routes' button at the bottom right of the 'Routes' section.

Press add route button, but first we have to connect internet gateway with our VPC then we will go again to internet gateway menu

The screenshot shows the AWS VPC Management Console with the URL <https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#EditRoutes:RouteTableId=rtb-00bb0506d1c5abcf4>. The page title is "Edit routes". The main content area displays a table with one row:

| Destination | Target | Status | Propagated |
|-------------|--------|--------|------------|
| 10.0.0.0/20 | local  | Active | No         |

At the bottom of the table, there is a red box around the "Add route" button.

In internet gateway menu go to created gateway ID and then press Action button above and click on Attach to VPC button

The screenshot shows the AWS VPC Management Console with the URL <https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#InternetGatewayId=igw-001b622efa11d29df>. The page title is "igw-001b622efa11d29df / InternetGatewayForPublicSubnet". The left sidebar shows the "Internet Gateways" section. The main content area displays the "Details" tab for the gateway:

|  |                   |             |                       |
|--|-------------------|-------------|-----------------------|
| Internet gateway ID<br>igw-001b622efa11d29df | State<br>Detached | VPC ID<br>- | Owner<br>855878568422 |
|--|-------------------|-------------|-----------------------|

On the right, there is an "Actions" dropdown menu with the following options: Attach to VPC, Detach from VPC, Manage tags, and Delete. A red arrow points to the "Attach to VPC" option.

Select VPC that is created before and then hit attach internet gateway button

The screenshot shows the 'Attach to VPC' dialog box for an Internet Gateway. A red box highlights the search bar where 'vpc-0e6ca66620f0b82fa' has been typed. A red arrow points from the bottom right towards the 'Attach internet gateway' button.

Now Internet gateway is attached to our VPC ID

The screenshot shows the 'Internet gateways' page in the VPC Management Console. A red arrow points to the 'Attached' status of the first gateway in the list. The table displays two entries:

| Name                 | Internet gateway ID   | State    | VPC ID                                |
|----------------------|-----------------------|----------|---------------------------------------|
| InternetGatewayFo... | igw-001b622efa11d29df | Attached | vpc-0e6ca66620f0b82fa   Assignment... |
| -                    | igw-c5c962a2          | Attached | vpc-a766ccc1                          |

Then go again to route tables menu and select ID of public subnet's route and at edit routes menu select internet gateway

The screenshot shows the AWS VPC Management Console with the URL <https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#EditRoutes:RouteTableId=rtb-00bb0506d1c5abcf4>. The page title is "Edit routes". The table shows one route entry:

| Destination | Target  | Status | Propagated                            |
|-------------|---|--------|---------------------------------------|
| 10.0.0.0/20 | local   | Active | No                                    |
| 0.0.0.0/0   | igw-001b622efa11d29df<br>(InternetGatewayForPublicSubnet) | No     | <input type="button" value="Remove"/> |

At the bottom right, there are "Cancel", "Preview", and "Save changes" buttons. A red box surrounds the search bar containing "igw-", and a red arrow points from this box to the "Save changes" button.

next hit Save changes button

The screenshot shows the AWS VPC Management Console with the same URL and page title as the previous screenshot. The table shows the same route entries. A red arrow points to the "Save changes" button at the bottom right of the page.

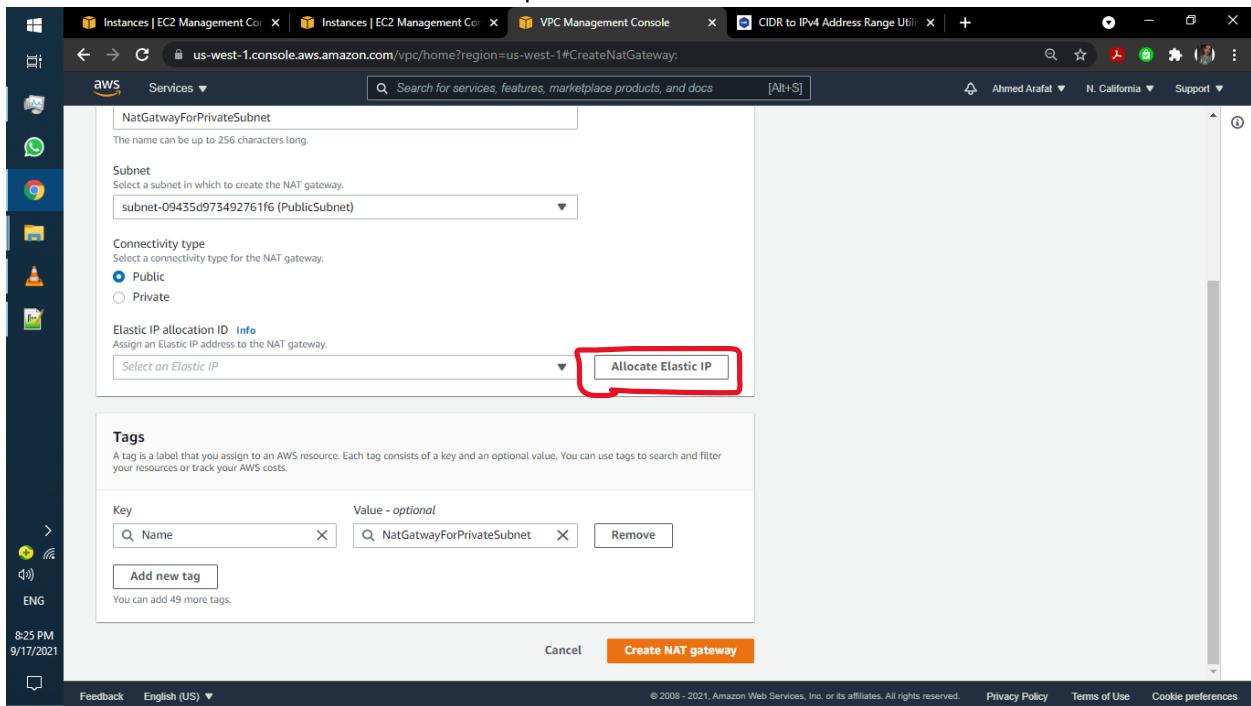
Now go to NAT gateways so private subnet can be accessed using public one

The screenshot shows the AWS VPC Management Console. On the left, there's a navigation sidebar with various VPC-related options like Subnets, Route Tables, Internet Gateways, etc. Under the 'NAT Gateways' section, a red box highlights the 'NAT Gateways' link. At the top right, there's a large orange button labeled 'Create NAT gateway' which is also highlighted with a red box.

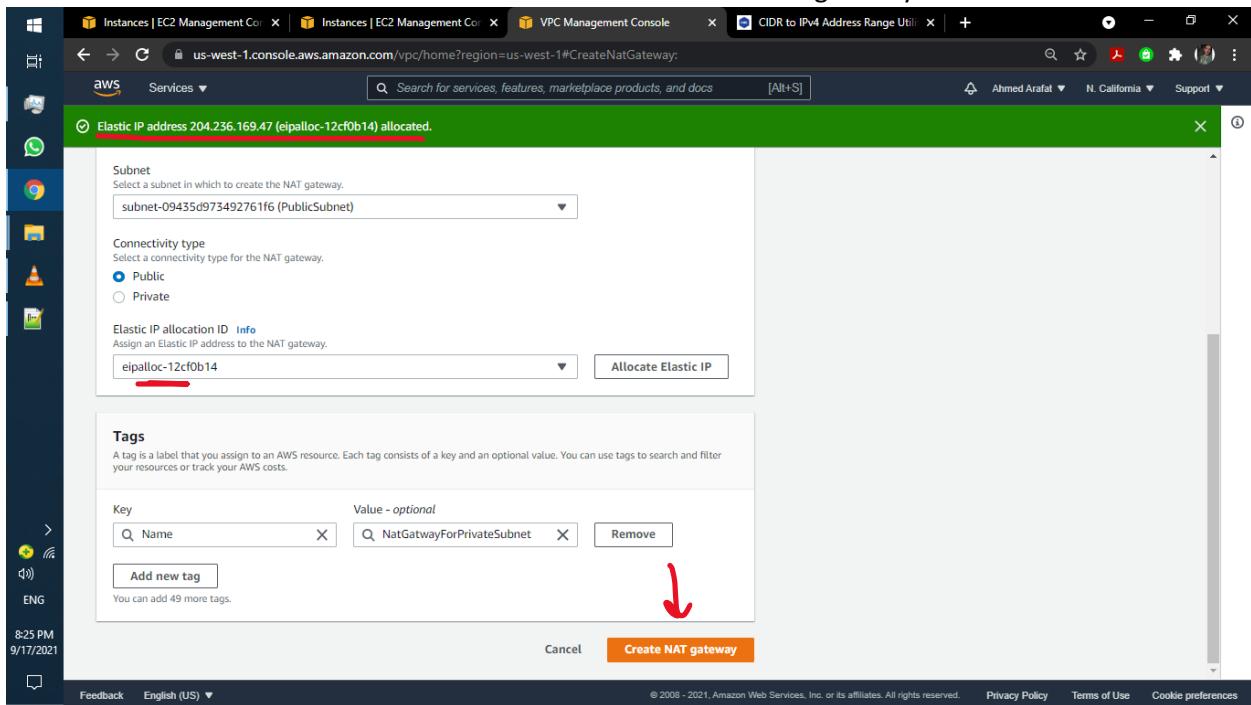
Pick up a name for NAT gateway and link it to public subnet

The screenshot shows the 'Create NAT gateway' wizard. It has several steps: 'VPC > NAT gateways > Create NAT gateway'. The current step is 'NAT gateway settings'. In this step, there are fields for 'Name - optional' (containing 'NatGatewayForPrivateSubnet'), 'Subnet' (containing 'subnet-09435d973492761f6 (PublicSubnet)'), 'Connectivity type' (with 'Public' selected), and 'Elastic IP allocation ID' (with a dropdown menu showing 'Select an Elastic IP'). A red box highlights the 'Name - optional' field. Another red box highlights the 'Subnet' dropdown.

Then press Allocate Elastic IP



Now Elastic IP is allocated then hit Create NAT gateway button



## NAT gateway is now created successfully

The screenshot shows the AWS VPC Management Console interface. The left sidebar has a 'NAT Gateways' section selected under 'VPC'. The main content area displays a table for the newly created NAT gateway, with a success message at the top: 'NAT gateway nat-0cb633a490f6b3a4d | NatGatewayForPrivateSubnet was created successfully.' The table details are as follows:

| NAT gateway ID                          | Connectivity type      | State                | State message                         |
|---|------------------------|----------------------|---------------------------------------|
| nat-0cb633a490f6b3a4d                   | Public                 | Pending              | -                                     |
| Elastic IP address                      | Private IP address     | Network interface ID | VPC                                   |
| -                                       | 10.0.0.28              | eni-04017445ad88fc6b | vpc-0e6ca66620f0b82fa / AssignmentVPC |
| Subnet                                  | Created                | Deleted              | -                                     |
| subnet-09435d973492761f6 / PublicSubnet | 2021/09/17 20:25 GMT+2 | -                    | -                                     |

Below the table, there are tabs for 'Monitoring' and 'Tags', with 'Monitoring' currently selected. The bottom of the page includes standard AWS footer links: Privacy Policy, Terms of Use, and Cookie preferences.