

# Create two VPC's in different regions and connect the two VPC's

Creating vpc 1:

The screenshot shows the 'Create VPC' page in the AWS VPC console. Under 'VPC settings', the 'Resources to create' section has 'VPC only' selected. The 'Name tag - optional' field contains 'myvpc1'. In the 'IPv4 CIDR block' section, 'IPv4 CIDR manual input' is selected, and the CIDR block is set to '160.0.0.0/16'. The page also includes a note: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.'

Ipv4 ip address: 160.0.0.0/16

The screenshot shows the 'Create VPC' page in the AWS VPC console. Under 'VPC settings', the 'Resources to create' section has 'VPC only' selected. The 'Name tag - optional' field contains 'myvpc1'. In the 'IPv4 CIDR block' section, 'IPv4 CIDR manual input' is selected, and the CIDR block is set to '160.0.0.0/16'. The page also includes a note: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.'

CreateVpc | VPC Console

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreateVpc:createMode=vpcOnly

Services

IPAM-allocated IPv6 CIDR block

- Amazon-provided IPv6 CIDR block
- IPv6 CIDR owned by me

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	myvpc1

Add tag

You can add 49 more tags

Cancel Create VPC

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This screenshot shows the 'Create VPC' wizard in the AWS VPC console. The user has selected an 'IPAM-allocated IPv6 CIDR block' and chosen 'Amazon-provided IPv6 CIDR block'. The tenancy is set to 'Default'. A single tag named 'Name' is added with the value 'myvpc1'. The 'Create VPC' button is highlighted in orange at the bottom right.

VpcDetails | VPC Console

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#VpcDetails:VpcId=vpc-0e008936762c8eb7b

VPC dashboard

EC2 Global View

Filter by VPC: Select a VPC

Virtual private cloud

Your VPCs

- Subnets
- Route tables
- Internet gateways
- Egress-only internet gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists

Actions

You successfully created vpc-0e008936762c8eb7b / myvpc1

VPC > Your VPCs > vpc-0e008936762c8eb7b

vpc-0e008936762c8eb7b / myvpc1

Details Info

VPC ID	State	DNS hostnames	DNS resolution
vpc-0e008936762c8eb7b	Available	Disabled	Enabled
Tenancy	DHCP option set	Main route table	Main network ACL
Default	dopt-0429dc2edcc33e86	rtb-05041c7b29d0d91ad	acl-0593df4a75a255ee5
Default VPC	IPv4 CIDR	IPv6 pool	IPv6 CIDR (Network border group)
No	160.0.0.0/16	—	—
Network Address Usage metrics	Route 53 Resolver DNS	Owner ID	—
—	Firewall rule groups	637423623885	—

https://ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#dhcpOptions:DhcpOptionsId=dopt-0429dc2edcc33e86

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This screenshot shows the 'VpcDetails' page for the newly created VPC. It displays the VPC ID, state, and various network configurations. The VPC is currently available and using the default DHCP option set. The main route table is 'rtb-05041c7b29d0d91ad' and the main network ACL is 'acl-0593df4a75a255ee5'. The VPC has an IPv4 CIDR of 160.0.0.0/16 and no IPv6 CIDR assigned. The owner ID is listed as 637423623885. The left sidebar shows other VPC-related options like Subnets, Route tables, and Internet gateways.

## Creating subnet-1:

The screenshot shows the AWS VPC Subnets console. On the left, a navigation pane lists options like VPC dashboard, EC2 Global View, Filter by VPC, Virtual private cloud, Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, and Managed prefix lists. The Subnets section is selected. The main area displays a table titled "Subnets (3) Info" with columns: Name, Subnet ID, State, and VPC. The table contains three rows, each with a minus sign icon and a unique ID. A search bar at the top of the table allows filtering by attribute or tag. Below the table, a section titled "Select a subnet" provides options to create a new subnet or choose from existing ones.

The screenshot shows the "CreateSubnet" page in the AWS VPC console. The URL is ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreateSubnet. The navigation bar shows the path VPC > Subnets > Create subnet. The main section is titled "Create subnet" with a "Info" link. It has a "VPC" header. Under "VPC ID", it says "Create subnets in this VPC." A dropdown menu titled "Select a VPC" is open, showing two entries: "myvpc1" with IP range 160.0.0.0/16 and "vpc-01fd29185f3df5870" with IP range 172.31.0.0/16 and status "(default)". Below the dropdown, a message says "Select a VPC first to create new subnets." At the bottom, there is a button labeled "Add new subnet". The footer includes standard AWS navigation links and a CloudShell link.

CreateSubnet | VPC Console

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreateSubnet:

Services

Search

160.0.0.0/16

**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.  
 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.

**IPv4 VPC CIDR block** [Info](#)  
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

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CreateSubnet | VPC Console

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreateSubnet:

Services

Search

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
 The name can be up to 256 characters long.

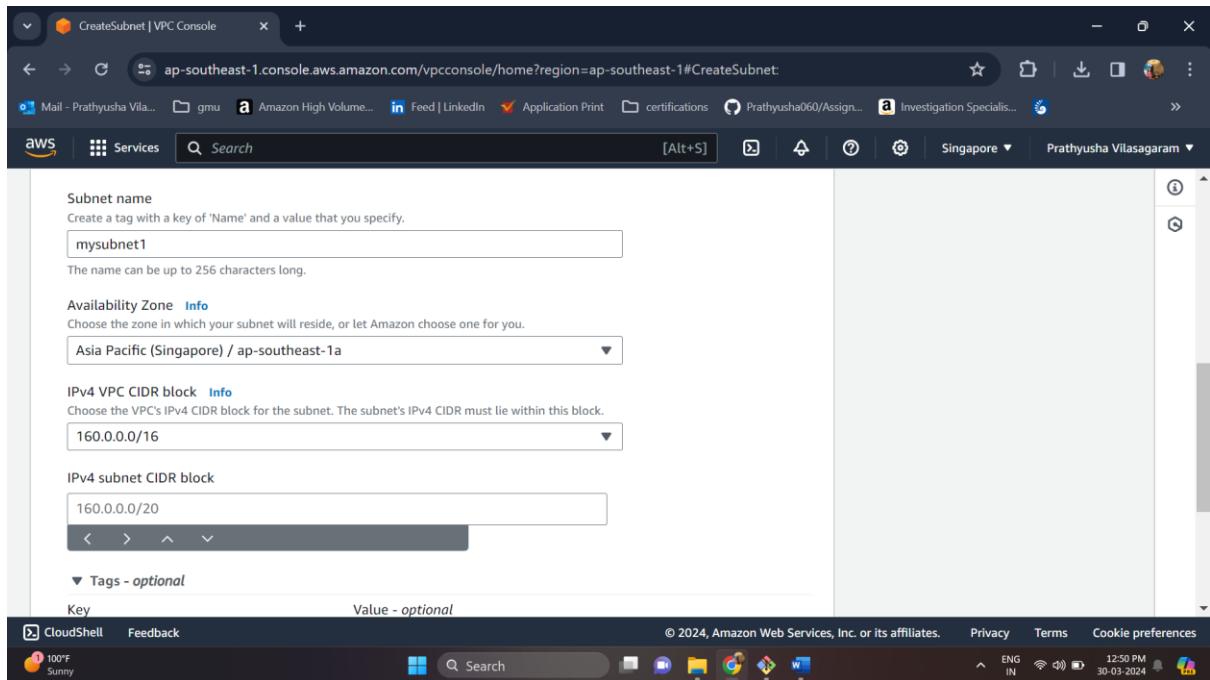
**Availability Zone** [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.  
  
 No preference  

Asia Pacific (Singapore) / ap-southeast-1a	ap-southeast-1
ID: apse1-az1 Network border group: ap-southeast-1	
Asia Pacific (Singapore) / ap-southeast-1b	ap-southeast-1
ID: apse1-az2 Network border group: ap-southeast-1	
Asia Pacific (Singapore) / ap-southeast-1c	ap-southeast-1
ID: apse1-az3 Network border group: ap-southeast-1	

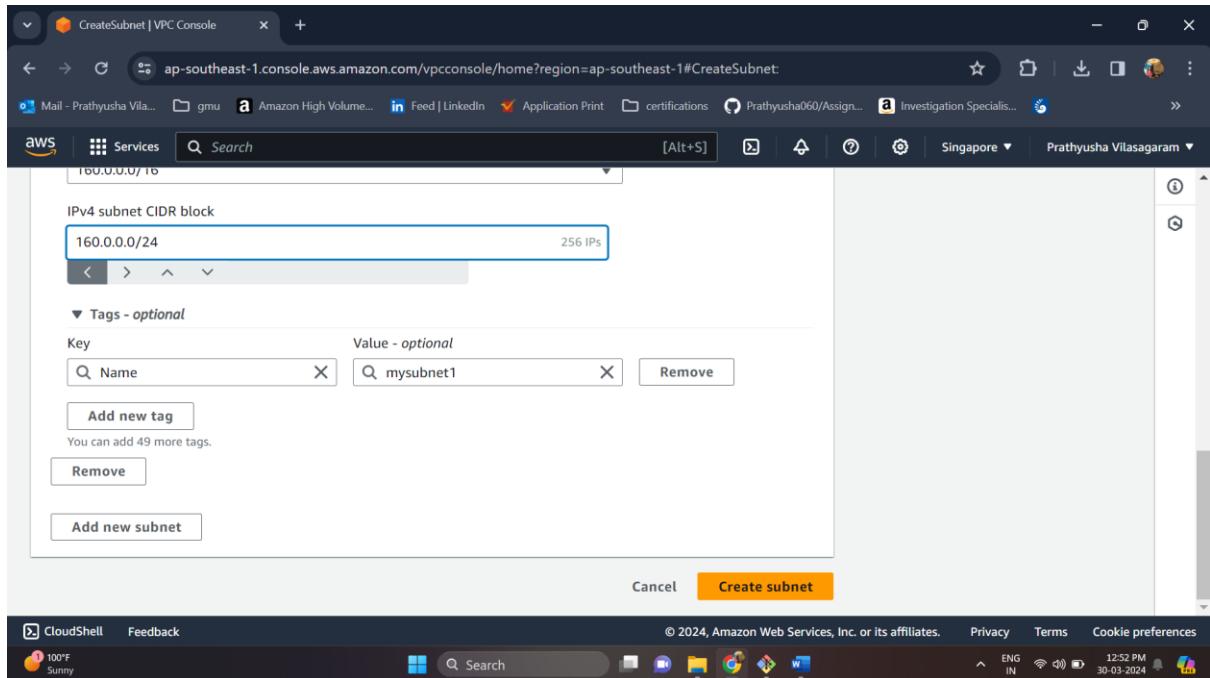
**Tags - optional**

Key	Value - optional

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IP address: 160.0.0.0/24



The screenshot shows the AWS VPC Management Console with the URL `ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#subnets:SubnetId=subnet-002a67f677f2511a4`. The main pane displays a success message: "You have successfully created 1 subnet: subnet-002a67f677f2511a4". Below this, the "Subnets (1) Info" section shows a table with one row:

Name	Subnet ID	State	VPC
mysubnet1	subnet-002a67f677f2511a4	Available	vpc-0e008936762c81

The sidebar on the left shows the navigation menu under "Virtual private cloud" with "Subnets" selected. The bottom status bar indicates "CloudShell" and "Feedback".

## Creating Internet gateway-1:

The screenshot shows the AWS VPC Console with the URL `ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#igws:`. The main pane displays a success message: "You have successfully created 1 internet gateway: igw-0b7e99e8d8812e3a9". Below this, the "Internet gateways (1) Info" section shows a table with one row:

Name	Internet gateway ID	State	VPC ID
-	igw-0b7e99e8d8812e3a9	Attached	vpc-01fd291!

The sidebar on the left shows the navigation menu under "Virtual private cloud" with "Internet gateways" selected. The bottom status bar indicates "CloudShell" and "Feedback".

Create internet gateway | VPC M...

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreateInternetGateway:

VPC Services Search [Alt+S] Singapore Prathyusha Vilasagaram

VPC > Internet gateways > Create internet gateway

## 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-ingw1"/>

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InternetGateway | VPC Console

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#InternetGateway:internetGatewayId=igw-04c09ea5b3c4e92d9-my-ingw1:

VPC dashboard EC2 Global View Filter by VPC: Select a VPC

Virtual private cloud Your VPCs Subnets Route tables Internet gateways Egress-only internet gateways DHCP option sets Elastic IPs Managed prefix lists

The following internet gateway was created: igw-04c09ea5b3c4e92d9 - my-ingw1. You can now attach to a VPC to enable the VPC to communicate with the internet. Attach to a VPC

VPC > Internet gateways > igw-04c09ea5b3c4e92d9 / my-ingw1 Actions

**Details** Info

Internet gateway ID igw-04c09ea5b3c4e92d9	State Detached	VPC ID -	Owner 637423623885
--	-------------------	-------------	-----------------------

**Tags**

Key	Value
Name	my-ingw1

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## Attach VPC:

VPC > Internet gateways > igw-04c09ea5b3c4e92d9

**igw-04c09ea5b3c4e92d9 / my-ingw1**

**Details** Info

Internet gateway ID	State	VPC ID
igw-04c09ea5b3c4e92d9	Detached	-

**Tags**

Key	Value
Name	my-ingw1

**Actions**

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

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VPC > Internet gateways > Attach to VPC (igw-04c09ea5b3c4e92d9) 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
myvpc1

AWS Command Line Interface command

Cancel **Attach internet gateway**

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The screenshot shows the AWS VPC Console with the URL [ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#InternetGateway:internetGatewayId=igw-04c09ea5b3c4e92d9](https://ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#InternetGateway:internetGatewayId=igw-04c09ea5b3c4e92d9). The main content area displays an Internet gateway named "igw-04c09ea5b3c4e92d9 / my-ingw1". The "Details" tab is selected, showing the following information:

Internet gateway ID	State	VPC ID	Owner
igw-04c09ea5b3c4e92d9	Attached	vpc-0e008936762c8eb7b   myvpc1	637423623885

The "Tags" section shows a single tag: Name = my-ingw1. There is a "Manage tags" button next to the search bar.

The left sidebar shows the navigation menu for VPC services, including "Virtual private cloud" and "Internet gateways". The "Internet gateways" section is currently selected.

## Creating route table-1:

The screenshot shows the AWS VPC Console with the URL [ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#RouteTables](https://ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#RouteTables). The main content area displays a route table named "rtb-042a7c92169446206". The "Route tables (1) Info" table shows the following data:

Name	Route table ID	Explicit subnet associ...	Edge association
-	rtb-042a7c92169446206	-	-

The "Select a route table" dropdown is open, showing the newly created route table.

The left sidebar shows the navigation menu for VPC services, including "Virtual private cloud" and "Route tables". The "Route tables" section is currently selected.

CreateRouteTable | VPC Console

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreateRouteTable:

VPC > Route tables > Create route table

## 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.

VPC  
The VPC to use for this route table.

**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.

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CreateRouteTable | VPC Console

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreateRouteTable:

VPC > Route tables > Create route table

## 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.

VPC  
The VPC to use for this route table.

**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*  
    
  
You can add 49 more tags.

Cancel

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The screenshot shows the AWS VPC Console with a success message: "Route table rtb-083f818a2c4464929 | my-route1 was created successfully." The main pane displays the details of the newly created route table, including its ID (rtb-083f818a2c4464929), being the Main route table (No), and owned by VPC vpc-0e008936762c8eb7b (myvpc1). The "Actions" dropdown menu is visible.

## Edit subnet associations:

The screenshot shows the AWS VPC Console with the "Actions" dropdown menu open, specifically the "Edit subnet associations" option. The main pane displays the details of the route table, including its ID (rtb-083f818a2c4464929), being the Main route table (No), and owned by VPC vpc-0e008936762c8eb7b (myvpc1).

**EditRouteTableSubnetAssociations**

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#EditRouteTableSubnetAssociations:RouteT...

Services Search [Alt+S] Singapore Prathyusha Vilasagaram

Route tables / rtb-05041c7b29d0d9 Main (rtb-05041c7b29d0d9)

## Edit subnet associations

Change which subnets are associated with this route table.

**Available subnets (1/1)**

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
mysubnet1	subnet-002a67f677f2511a4	160.0.0.0/24	-	Main (rtb-05041c7b29d0d9)

**Selected subnets**

subnet-002a67f677f2511a4 / mysubnet1

Save associations

**RouteTableDetails | VPC Console**

ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#RouteTableDetails:RouteTableId=rtb-083f...

VPC dashboard EC2 Global View Filter by VPC: Select a VPC

Virtual private cloud Your VPCs Subnets **Route tables** Internet gateways Egress-only internet gateways DHCP option sets Elastic IPs Managed prefix lists

You have successfully updated subnet associations for rtb-083f818a2c4464929 / my-route1.

VPC > Route tables > rtb-083f818a2c4464929

rtb-083f818a2c4464929 / my-route1 Actions

**Details** Info

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-083f818a2c4464929	No	subnet-002a67f677f2511a4 / mysubnet1	-
Owner ID	637423623885		
VPC	vpc-0e008936762c8eb7b   myvpc1		

Routes Subnet associations Edge associations Route propagation Tags

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Screenshot of the AWS VPC Console showing Route Tables.

**Route 1**

Destination	Target	Status
160.0.0.0/16	local	Active

Propagated: No

---

**Route 2**

Destination	Target	Status
0.0.0.0/0	Internet Gateway	Active
	igw-04c09ea5b3c4e92d9	

Propagated: No

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Screenshot of the AWS VPC Console showing Route Table Details.

Updated routes for rtb-083f818a2c4464929 / my-route1 successfully

VPC > Route tables > rtb-083f818a2c4464929

rtb-083f818a2c4464929 / my-route1

Actions

**Details** Info

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-083f818a2c4464929	No	subnet-002a67f677f2511a4 / mysubnet1	-
VPC	637423623885		
dhcp option sets	vpc-0e008936762c8eb7b   myvpc1		

Routes Subnet associations Edge associations Route propagation Tags

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# Creating EC2 Instance:

The screenshot shows the AWS Services search results for 'ec2'. The search bar at the top contains 'ec2'. On the left, a sidebar menu includes 'EC2 Dashboard', 'EC2 Global View', 'Events', and a expanded 'Instances' section with 'Instances', 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', 'Capacity', and 'Reservations'. Below the sidebar is a 'Search results for 'ec2'' heading. The main content area displays a list of services under 'Services (13)'. The first item is 'EC2' with the subdescription 'Virtual Servers in the Cloud'. Other listed services include 'EC2 Image Builder', 'Recycle Bin', and 'Amazon Inspector'. A right-hand sidebar titled 'Alarm status' is partially visible.

The screenshot shows the AWS Instances search results for 'ec2'. The search bar at the top contains 'ec2'. The left sidebar is identical to the previous screenshot. The main content area has a different header, 'Instances Info', with a search bar and filters for 'Find Instance by attribute or tag (case-sensitive)', 'Instance state' (set to 'running'), and 'Actions'. A large button labeled 'Launch instances' is prominent. Below this is a table header with columns: 'Name', 'Instance ID', 'Instance state', 'Instance type', 'Status check', and 'Alarm status'. A message 'No matching instances found' is displayed. A modal window titled 'Select an instance' is open at the bottom. The footer includes standard AWS links like CloudShell and Feedback, along with system status icons.

The screenshot shows the 'Launch an instance' page in the AWS EC2 console. The top navigation bar includes tabs for 'Launch an instance | EC2 | ap-southeast-1' and 'EC2 Instance Connect | ap-southeast-1'. The main content area has a breadcrumb trail: 'EC2 > Instances > Launch an instance'. The first section is titled 'Launch an instance' with a 'Info' link. A sub-section titled 'Name and tags' also has an 'Info' link. It contains a 'Name' field with the value 'inst1' and a 'Add additional tags' button.

**Name and tags** [Info](#)

Name  
inst1 [Add additional tags](#)

**Application and OS Images (Amazon Machine Image)** [Info](#)

As AMI is a template that contains the software configurations (operating system, application source and applications) required to run a specific type of workloads.

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The screenshot continues from the previous one, showing the 'Launch an instance' page. The 'Key pair name - required' section now shows 'file1' selected in a dropdown menu, with a 'Create new key pair' button next to it. Below this, the 'Network settings' section is expanded, showing 'Edit' and 'Network' sub-sections. The 'Network' sub-section lists 'vpc-01fd29185f3df5870' and 'Subnet' with 'No preference (Default subnet in any availability zone)'.

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*  
file1 [Create new key pair](#)

**Network settings** [Info](#)

Network [Info](#)  
vpc-01fd29185f3df5870

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

Auto-assign public IP [Info](#)

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The screenshot shows the 'Network settings' section of the AWS EC2 'Launch Instances' wizard. It includes:

- VPC - required**: A dropdown menu set to "vpc-0e008936762c8eb7b (myvpc1) 160.0.0.0/16".
- Subnet**: A dropdown menu set to "subnet-002a67f67f2511a4 mysubnet1".
  - Details: VPC: vpc-0e008936762c8eb7b Owner: 637423623885 Availability Zone: ap-southeast-1a IP addresses available: 251 CIDR: 160.0.0.0/24
  - A blue link "Create new subnet" is visible.
- Auto-assign public IP**: A dropdown menu set to "Enable".
- Firewall (security groups)**: A section with two options:
  - Create security group
  - Select existing security group

At the bottom of the configuration panel, there are "CloudShell" and "Feedback" buttons, and a footer with copyright information and navigation links.

The screenshot shows the main configuration panel of the AWS EC2 'Launch Instances' wizard. It includes:

- Number of instances**: A text input field containing "1".
- Software Image (AMI)**: A section for selecting the Amazon Linux 2023 AMI 2023.4.2...read more ami-097c4e1feeee169e5
- Virtual server type (instance type)**: A dropdown menu set to "t2.micro".
- Firewall (security group)**: A section for creating a new security group.
- Buttons at the bottom**: "Cancel", "Launch instance" (in orange), and "Review commands".

At the bottom of the configuration panel, there are "CloudShell" and "Feedback" buttons, and a footer with copyright information and navigation links.

The screenshot shows the AWS EC2 'Launch an instance' success page. At the top, there are two tabs: 'Launch an instance | EC2 | ap-southeast-1' and 'EC2 Instance Connect | ap-southeast-1'. The main content area has a green success banner stating 'Successfully initiated launch of instance (i-01d73e2ed86d92610)'. Below the banner is a link to 'Launch log'. A 'Next Steps' section contains links to 'Create billing and free tier usage alerts', 'Connect to your instance', 'Connect an RDS database', and 'Create EBS snapshot policy'. A search bar at the bottom asks 'What would you like to do next with this instance, for example "create alarm" or "create backup"'.

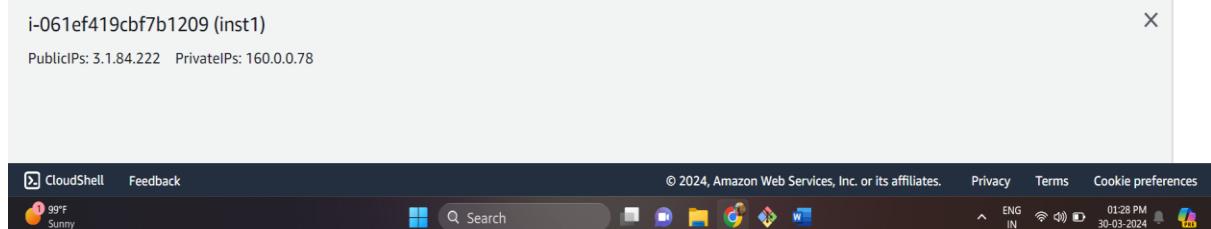
The screenshot shows the AWS EC2 Instances page. The left sidebar includes 'EC2 Dashboard', 'EC2 Global View', 'Events', and sections for 'Instances' (with 'Instances' selected), 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', 'Capacity', and 'Reservations'. The main content area displays 'Instances (1) Info' with a table showing one instance: 'inst1' (Instance ID: i-01d73e2ed86d92610, State: Running, Type: t2.micro, Status check: Initializing). A 'Select an instance' dialog is open below the table. The bottom navigation bar includes 'CloudShell', 'Feedback', 'Privacy', 'Terms', and 'Cookie preferences'.

The screenshot shows the AWS EC2 Instances page. On the left, a sidebar lists various EC2-related options like Dashboard, Global View, Events, Instances, and Images. The main content area displays the 'Instance summary for i-061ef419cbf7b1209 (inst1)'. Key details shown include:

Attribute	Value
Instance ID	i-061ef419cbf7b1209 (inst1)
Public IPv4 address	3.1.84.222
Private IPv4 addresses	160.0.0.78
IPv6 address	-
Instance state	Running
Public IPv4 DNS	-
Hostname type	IP name: ip-160-0-0-78.ap-southeast-1.compute.internal
Private IP DNS name (IPv4 only)	ip-160-0-0-78.ap-southeast-1.compute.internal
Answer private resource DNS name	-
Instance type	t2.micro
Elastic IP addresses	-
Auto-assigned IP address	-
VPC ID	-
AWS Compute Optimizer finding	-

At the bottom of the page, there's a CloudShell interface with a terminal window showing the AWS logo and the message "Amazon Linux 2023".

```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
[ec2-user@ip-160-0-0-78 ~]$
```



## Creating new VPC in California:

The screenshot shows the AWS VPC Console interface. In the top navigation bar, there are tabs for 'EditRoutes | VPC Console', 'Instance details | EC2 | ap-southe...', 'EC2 Instance Connect | ap-southe...', and 'vpcs | VPC Console'. The main content area is titled 'Your VPCs (1) Info' and displays a table with one row. The columns are 'Name', 'VPC ID', 'State', and 'IPv4 CIDR'. The single entry is 'vpc-0e818ff629d36f28f' with state 'Available' and IPv4 CIDR '172.31.0.0/16'. On the left sidebar, under 'Virtual private cloud', there is a section titled 'Your VPCs' which includes links for Subnets, Route tables, Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, and Managed prefix lists. The bottom of the screen shows the browser's address bar with the URL 'https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#vpcs:' and the AWS logo.

## IP address 150.0.0.0/16:

The screenshot shows the 'CreateVpc | VPC Console' interface. The top navigation bar has tabs for 'EditRoutes | VPC Console', 'Instance details | EC2 | ap-southe...', 'EC2 Instance Connect | ap-southe...', and 'CreateVpc | VPC Console'. The main content area is titled 'VPC settings'. It features a section for 'Resources to create' with two options: 'VPC only' (selected) and 'VPC and more'. Below this is a 'Name tag - optional' field containing 'myvpc2'. Under 'IPv4 CIDR block', it says 'IPv4 manual input' is selected, and the 'IPv4 CIDR' field contains '150.0.0.0/16'. At the bottom, there is an 'IPv6 CIDR block' section with a link to 'Info'. The bottom of the screen shows the browser's address bar with the URL 'https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#CreateVpc:createMode=vpcOnly' and the AWS logo.

IPAM-allocated IPv6 CIDR block

Amazon-provided IPv6 CIDR block

IPv6 CIDR owned by me

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 myvpc2 Remove tag

Add tag

You can add 49 more tags

Cancel Create VPC

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VPC dashboard

EC2 Global View

Filter by VPC: Select a VPC

Virtual private cloud

Your VPCs

**Subnets**

Route tables

Internet gateways

Egress-only internet gateways

DHCP option sets

Elastic IPs

Managed prefix lists

**Subnets (2) Info**

Find resources by attribute or tag

Name	Subnet ID	State	VPC
-	subnet-0914e668edc697b25	Available	vpc-0e818ff629d36f
-	subnet-04bd62851a088554b	Available	vpc-0e818ff629d36f

Select a subnet

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## Create subnet2:

The screenshot shows the 'Create subnet' page in the AWS VPC console. The 'VPC ID' dropdown is set to 'vpc-0b7e07648b998366a (myvpc2)'. Under 'Associated VPC CIDRs', the IPv4 CIDR is listed as '150.0.0.0/16'. The 'Subnet settings' section is expanded, showing the 'Subnet 1 of 1' configuration. The 'Subnet name' field contains 'mysubnet2'. The 'Availability Zone' dropdown is set to 'US West (N. California) / us-west-1a'. The 'IPv4 VPC CIDR block' dropdown is set to '150.0.0.0/16'. The 'IPv4 subnet CIDR block' input field contains '150.0.0.0/24'.

The screenshot shows the 'Create subnet' page in the AWS VPC console, identical to the previous one but with the 'Subnet settings' section collapsed. The 'Subnet 1 of 1' configuration is visible at the bottom of the page. The 'Subnet name' field still contains 'mysubnet2', and the 'Availability Zone' dropdown is set to 'US West (N. California) / us-west-1a'. The 'IPv4 VPC CIDR block' dropdown is set to '150.0.0.0/16'. The 'IPv4 subnet CIDR block' input field contains '150.0.0.0/24'.

Screenshot of the AWS VPC Console showing the 'CreateSubnet' wizard.

IPv4 subnet CIDR block: 150.0.0.0/24 (256 IPs)

Tags - optional:

Key	Value - optional
Name	mysubnet2

Add new tag, Remove, Add new subnet, Cancel, Create subnet

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Screenshot of the AWS VPC Management Console showing the Subnets page.

You have successfully created 1 subnet: subnet-0bbe335ad8443fa77

Name	Subnet ID	State	VPC
mysubnet2	subnet-0bbe335ad8443fa77	Available	vpc-0b7e07648b998

Select a subnet

VPC dashboard, EC2 Global View, Filter by VPC, Select a VPC, Virtual private cloud, Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists, CloudShell, Feedback, © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences ENG IN 01:32 PM 30-03-2024

The screenshot shows the 'Edit subnet associations' page for a specific route table. The URL is <https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#EditRouteTableSubnetAssociations:RouteTableId=rtb-01dc7a1fcfb3e41d4>. The page title is 'Edit subnet associations'. A sub-header says 'Change which subnets are associated with this route table.' Below this, a table titled 'Available subnets (1)' lists one subnet: 'mysubnet2' with Subnet ID 'subnet-0bbe335ad8443...', IPv4 CIDR '150.0.0.0/24', and Route table ID 'Main (rtb-034fe63158717f2ad)'. There are 'Cancel' and 'Save associations' buttons at the bottom right.

## Creating internet gateway:

The screenshot shows the 'Internet gateways (1)' page in the AWS VPC console. The URL is <https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#igws>. The page title is 'Internet gateways (1)'. A sub-header says 'Select an internet gateway above'. On the left, a sidebar shows the 'Virtual private cloud' section with 'Your VPCs', 'Subnets', 'Route tables', 'Internet gateways' (which is selected), 'Egress-only internet gateways', 'DHCP option sets', 'Elastic IPs', and 'Managed prefix lists'. The main table lists one internet gateway: 'igw-0a522df358f4f72b8' with State 'Attached' and VPC ID 'vpc-0e818ff6'. There is a 'Create internet gateway' button at the top right. The CloudShell and Feedback buttons are visible at the bottom.

Screenshot of the AWS VPC Internet Gateway creation process:

**Internet gateway settings**

**Name tag**  
Creates a tag with a key of 'Name' and a value that you specify.  
my-ingw-2

**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
Q Name	Q my-ingw-2

Add new tag  
You can add 49 more tags.

Cancel Create internet gateway

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Screenshot of the AWS VPC Internet Gateway details page:

The following internet gateway was created: igw-00842ab3c21587e65 - my-ingw-2. You can now attach to a VPC to enable the VPC to communicate with the internet.

VPC > Internet gateways > igw-00842ab3c21587e65

**igw-00842ab3c21587e65 / my-ingw-2**

**Details** Info

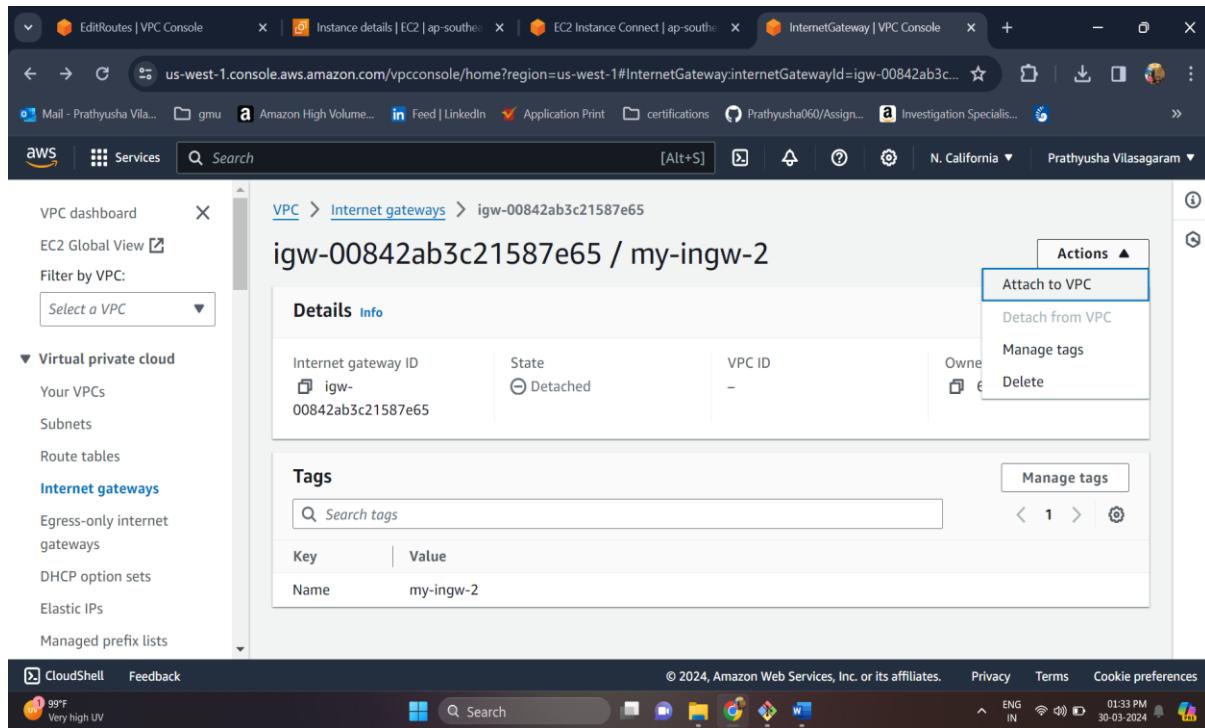
Internet gateway ID: igw-00842ab3c21587e65	State: Detached	VPC ID: -	Owner: 637423623885
--	-----------------	-----------	---------------------

**Tags**

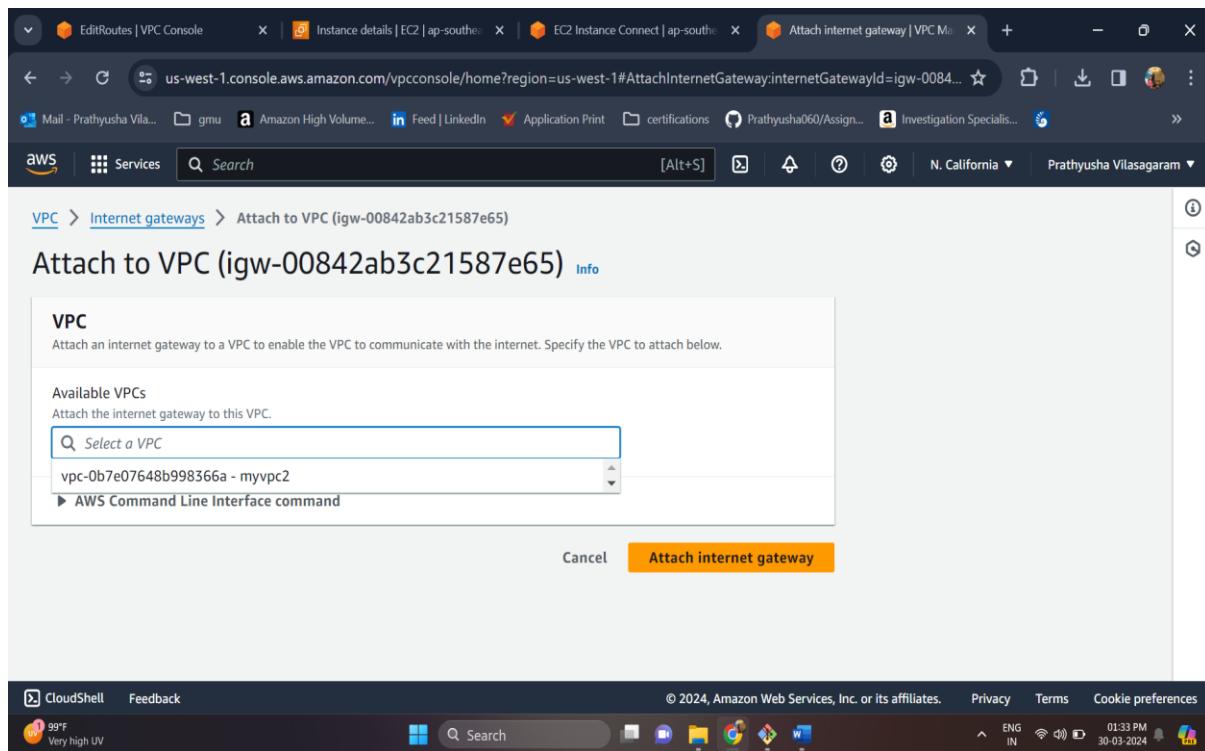
Key	Value
Name	my-ingw-2

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## Attach to VPC:



The screenshot shows the AWS VPC Internet Gateways console. The URL is <https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#InternetGateway:id=igw-00842ab3c21587e65>. The page displays an internet gateway with the ID `igw-00842ab3c21587e65` and name `my-ingw-2`. The 'Actions' menu is open, showing options: `Attach to VPC` (highlighted), `Detach from VPC`, `Manage tags`, and `Delete`.



The screenshot shows the 'Attach to VPC' dialog box. The URL is <https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#AttachInternetGateway:id=igw-00842ab3c21587e65>. The dialog title is 'Attach to VPC (igw-00842ab3c21587e65)'. It contains a 'VPC' section with the sub-instruction: 'Attach an internet gateway to a VPC to enable the VPC to communicate with the internet. Specify the VPC to attach below.' A 'Available VPCs' section lists 'vpc-0b7e07648b998366a - myvpc2'. At the bottom are 'Cancel' and 'Attach internet gateway' buttons, with 'Attach internet gateway' being highlighted.

The screenshot shows the AWS VPC Internet Gateway details page. The URL is <https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#InternetGateway:internetGatewayId=igw-00842ab3c21587e65>. The page title is "Internet gateway igw-00842ab3c21587e65 successfully attached to [vpc-0b7e07648b998366a](#)". The breadcrumb navigation shows "VPC > Internet gateways > igw-00842ab3c21587e65". The main content area displays the Internet gateway ID (igw-00842ab3c21587e65), State (Attached), VPC ID (vpc-0b7e07648b998366a), and Owner (myvpc2). A "Tags" section shows a single tag named "Name" with the value "my-ingw-2". The left sidebar includes links for VPC dashboard, EC2 Global View, Filter by VPC, Virtual private cloud (Your VPCs, Subnets, Route tables), Internet gateways (Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists), CloudShell, and Feedback.

## Create Route table:

The screenshot shows the AWS Route Tables page. The URL is <https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#RouteTables>. The page title is "Route tables (1) Info". The breadcrumb navigation shows "VPC > Route tables > rtb-031108f8938303b03". The main content area displays a table of route tables with one entry: "rtb-031108f8938303b03". Below the table, there is a "Select a route table" section with three icons for copy, cut, and paste. The left sidebar includes links for VPC dashboard, EC2 Global View, Filter by VPC, Virtual private cloud (Your VPCs, Subnets), Route tables (Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists), CloudShell, and Feedback.

The screenshot shows the 'CreateRouteTable' step in the AWS VPC console. A route table named 'my-route2' is being created for the VPC 'vpc-0b7e07648b998366a (myvpc2)'. A single tag 'my-route2' is added under the 'Tags' section. The 'Create route table' button is highlighted in orange at the bottom right.

## Edit routes:

The screenshot shows the 'RouteTableDetails' step in the AWS VPC console. A success message indicates that the route table 'rtb-01dc7a1fcfb3e41d4 | my-route2' was created successfully. The 'Actions' menu on the right side of the page includes options like 'Set main route table', 'Edit subnet associations', 'Edit edge associations', 'Edit route propagation', 'Edit routes', 'Manage tags', and 'Delete'. The 'Details' tab is selected, showing the route table ID, main status (No), owner ID (637423623885), and VPC information ('vpc-0b7e07648b998366a | myvpc2').

Screenshot of the AWS VPC Route Tables page showing route details and actions.

**Route Table Details:**

- Route table ID: rtb-01dc7a1fcfb3e41d4
- Main: No
- Owner ID: 637423623885
- VPC: myvpc2

**Actions:**

- Set main route table
- Edit subnet associations
- Edit edge associations
- Edit route propagation
- Edit routes
- Manage tags
- Delete

**Routes (1):**

Destination	Target	Status
0.0.0.0/0	Internet Gateway	-

**CloudShell:** 99°F Sunny

Screenshot of the AWS Edit Routes page for route table rtb-01dc7a1fcfb3e41d4.

**Route 2:**

Destination	Target	Status
0.0.0.0/0	Internet Gateway	-

**Propagated:** No

**Add route:** igw-00842ab3c21587e65 (my-ingw-2)

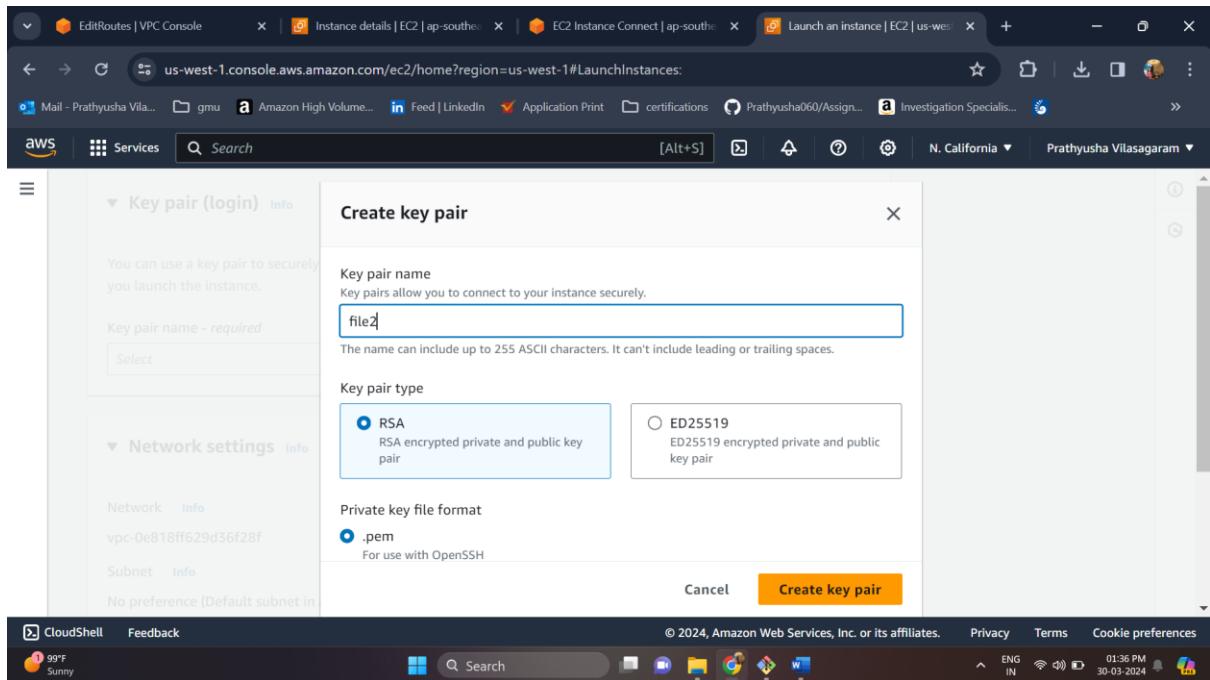
**Buttons:** Remove, Add route, Save changes

**CloudShell:** 99°F Sunny

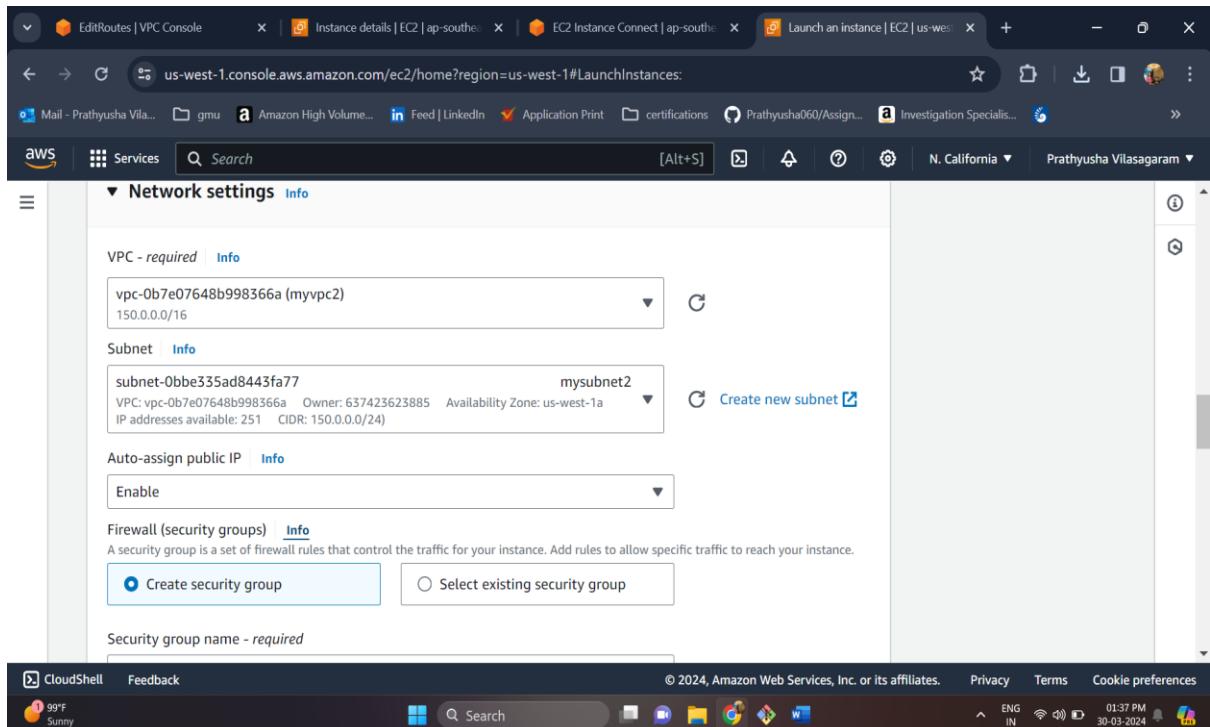
## Create instance 2 :

The screenshot shows the AWS EC2 Instances page. The left sidebar is expanded, showing options like EC2 Dashboard, EC2 Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity, and Reservations. The main content area has a search bar with 'Find Instance by attribute or tag (case-sensitive)' and a filter for 'Instance state = running'. A button for 'Launch instances' is visible. Below the search bar, there's a table header with columns for Name, Instance ID, Instance state, Instance type, Status check, and Alarm status. A message says 'No matching instances found'. A modal window titled 'Select an instance' is open at the bottom.

The screenshot shows the 'Launch an instance' wizard. The top navigation bar includes links for EditRoutes | VPC Console, Instance details | EC2 | ap-southe..., EC2 Instance Connect | ap-southe..., Instances | EC2 | us-west-1, and Launch an instance | EC2 | us-west-1. The left sidebar shows EC2 > Instances > Launch an instance. The main form is titled 'Launch an instance' with a 'Name and tags' section where 'inst2' is entered. Below it is a 'Application and OS Images (Amazon Machine Image)' section. At the bottom, there's a note about AMI templates and a 'Next Step' button.

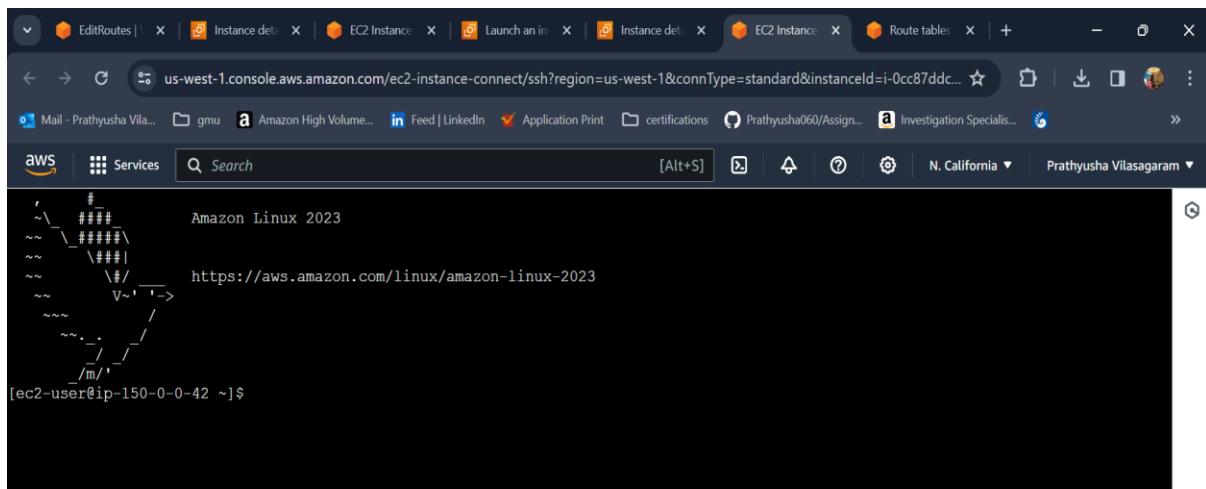


## Edit network settings:



The screenshot shows the AWS EC2 Instances Launch an instance page. A green success banner at the top states: "Success Successfully initiated launch of instance (i-0cc87ddcb33e270ad)". Below the banner, there is a link to "Launch log". A "Next Steps" section follows, containing four cards: "Create billing and free tier usage alerts", "Connect to your instance", "Connect an RDS database", and "Create EBS snapshot policy". A search bar and a navigation menu are also visible.

The screenshot shows the AWS EC2 Instances Connect to instance page for instance i-0cc87ddcb33e270ad. It displays two connection methods: "Connect using EC2 Instance Connect" (selected) and "Connect using EC2 Instance Connect Endpoint". The "EC2 Instance Connect" tab is active. Other tabs include "Session Manager", "SSH client", and "EC2 serial console". A "Public IP address" field shows "18.144.172.219". The bottom of the page includes a navigation menu and system status indicators.



```

Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

[ec2-user@ip-150-0-0-42 ~]$

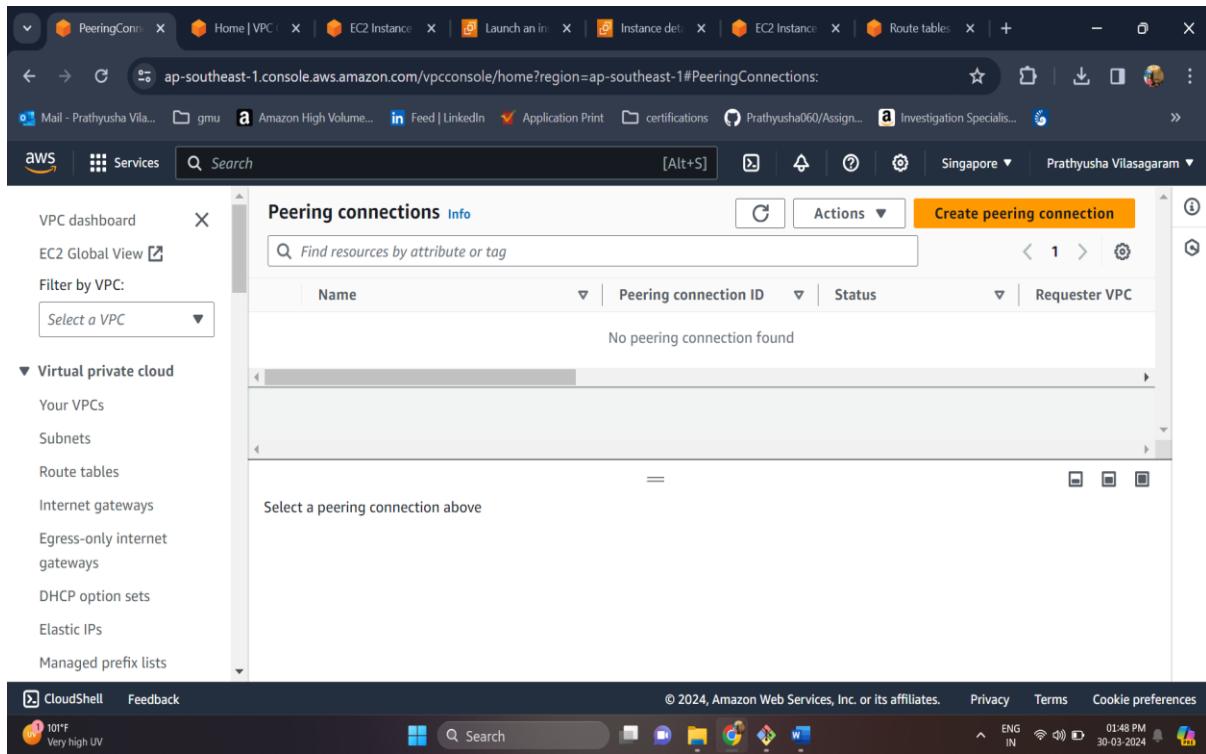
```

i-Occ87ddcb33e270ad (inst2)

PublicIPs: 18.144.172.219 PrivateIPs: 150.0.0.42

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## Creating Peering connection in 1<sup>st</sup> region:



VPC dashboard

EC2 Global View

Filter by VPC: Select a VPC

Virtual private cloud

- Your VPCs
- Subnets
- Route tables
- Internet gateways
- Egress-only internet gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists

Peering connections Info Actions Create peering connection

Name	Peering connection ID	Status	Requester VPC
No peering connection found			

Select a peering connection above

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The screenshot shows the 'Create peering connection' page in the AWS VPC console. The 'Peering connection settings' section is active, showing a 'Name - optional' field containing 'peering1'. Below it, the 'Select a local VPC to peer with' section shows a dropdown menu labeled 'Select a VPC'. The browser's address bar shows the URL: ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreatePeeringConnection.

The screenshot shows the 'Create peering connection' page in the AWS VPC console, with the 'Select another VPC to peer with' section active. It includes fields for 'Account' (set to 'My account'), 'Region' (set to 'Another Region' in 'us-west-1'), and 'VPC ID (Acceptor)' containing 'vpc-0b7e07648b998366a'. The browser's address bar shows the URL: ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#CreatePeeringConnection.

A VPC peering connection **pcx-0ba4ff8a3a1526c2b / peering1** has been requested.

Remember to change your region to **us-west-1** to accept the peering connection.

Details		
Requester owner ID 637423623885	Acceptor owner ID 637423623885	VPC Peering connection ARN <a href="#">arn:aws:ec2:ap-southeast-1:637423623885:vpc-peering-connection/pcx-0ba4ff8a3a1526c2b</a>
Peering connection ID pcx-0ba4ff8a3a1526c2b	Requester VPC <a href="#">vpc-0e008936762c8eb7b / myvpc1</a>	Acceptor VPC <a href="#">vpc-0b7e07648b998366a</a>
Status Initiating Request to 637423623885 5	Requester CIDRs 160.0.0.0/16	Acceptor CIDRs -
Expiration time	Requester Region Singapore (ap-southeast-1)	

## Accepting peering connection in 2<sup>nd</sup> region:

Peering connections (1) [Info](#)

Name	Peering connection ID	Status	Requester VPC
-	pcx-0ba4ff8a3a1526c2b	Pending acceptance	vpc-0e008936762c8eb7b

Select a peering connection above

Screenshot of the AWS VPC Peering Connections console showing the acceptance of a peering connection request.

The screenshot shows the AWS Management Console with multiple tabs open, including "PeeringConn", "Home | VPC", "EC2 Instance", "PeeringConn", "Instance details", "EC2 Instance", and "Route tables". The main content area displays the "Accept VPC peering connection request" dialog for peering connection ID "pcx-0ba4ff8a3a1526c2b".

**Accept VPC peering connection request**

Are you sure you want to accept this VPC peering connection request? (pcx-0ba4ff8a3a1526c2b)

Requester VPC	Acceptor VPC	Requester CIDRs
vpc-0e008936762c8eb7b	vpc-0b7e07648b998366a / myvpc2	160.0.0.0/16
Acceptor CIDRs	Requester Region	Acceptor Region
-	Singapore (ap-southeast-1)	N. California (us-west-1)
Requester owner ID	Acceptor owner ID	
637423623885 (This account)	637423623885 (This account)	

Buttons: Cancel, Accept request

Left sidebar: VPC dashboard, EC2 Global View, Filter by VPC (Select a VPC dropdown), Virtual private cloud (Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists).

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Screenshot of the AWS VPC Peering Connections console showing the status of a established peering connection.

The screenshot shows the AWS Management Console with multiple tabs open, including "PeeringConn", "Home | VPC", "EC2 Instance", "PeeringConn", "Instance details", "EC2 Instance", and "Route tables". The main content area displays the details of a peering connection named "pcx-0ba4ff8a3a1526c2b".

**pcx-0ba4ff8a3a1526c2b**

**Details**

Your VPC peering connection (pcx-0ba4ff8a3a1526c2b) has been established.  
To send and receive traffic across this VPC peering connection, you must add a route to the peered VPC in one or more of your VPC route tables.

Actions

Requester owner ID 637423623885	Acceptor owner ID 637423623885	VPC Peering connection ARN arn:aws:ec2:us-west-1:637423623885:vpc-peering-connection/pcx-0ba4ff8a3a1526c2b
Peering connection ID pcx-0ba4ff8a3a1526c2b	Requester VPC vpc-0e008936762c8eb7b	Acceptor VPC vpc-0b7e07648b998366a / myvpc2
Status Provisioning	Requester CIDRs 160.0.0.0/16	Acceptor CIDRs

Left sidebar: VPC dashboard, EC2 Global View, Filter by VPC (Select a VPC dropdown), Virtual private cloud (Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists).

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## Edit route to add peering connection in California:

The screenshot shows the AWS VPC console with the URL <https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#EditRoutes:RouteTableId=rtb-01dc7a1fcfb3e41d4>. The page displays a table for 'Route 3' with one existing route and a button to 'Add route'. The existing route has a destination of 160.0.0.0/16 and a target of 'Peering Connection' with the ID pcx-0ba4ff8a3a1526c2b. There is also a 'Propagated' section indicating 'No'.

The screenshot shows the AWS VPC console with the URL <https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#RouteTableDetails:RouteTableId=rtb-01dc7a1fcfb3e41d4>. The page displays details for the route table rtb-01dc7a1fcfb3e41d4, including its ID, owner ID, and associations. A green success message at the top states: 'Updated routes for rtb-01dc7a1fcfb3e41d4 / my-route2 successfully'.

## Edit route to add peering connection in Singapore:

The screenshot shows the AWS VPC console interface. A new route is being created under 'Route 3'. The destination is set to 150.0.0.0/16 and the target is set to 'Peering Connection' with the value 'pcx-0ba4ff8a3a1526c2b'. The status is listed as '-' and propagation is set to 'No'. There are 'Add route' and 'Remove' buttons at the bottom. The top navigation bar shows the URL as 'ap-southeast-1.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-1#EditRoutes:RouteTableId=rtb-083f818a2c...' and the bottom navigation bar includes 'CloudShell', 'Feedback', and other AWS services.

The screenshot shows the AWS VPC console interface after the route has been updated. A green success message box displays the text 'Updated routes for rtb-083f818a2c4464929 / my-route1 successfully'. The main view shows the details for the route table 'rtb-083f818a2c4464929 / my-route1'. The 'Details' tab is selected, showing the Route table ID as 'rtb-083f818a2c4464929', Main as 'No', Owner ID as '637423623885', and VPC as 'vpc-0e008936762c8eb7b | myvpc1'. Other tabs include 'Subnet associations', 'Edge associations', 'Route propagation', and 'Tags'. The bottom navigation bar includes 'CloudShell', 'Feedback', and other AWS services.

## Edit security groups in instance1:

The screenshot shows the AWS EC2 Security Groups page. The URL is <https://ap-southeast-1.console.aws.amazon.com/ec2/home?region=ap-southeast-1#SecurityGroup:securityGroupId=sg-0a5f05ba9cff2ceae>. The page title is "sg-0a5f05ba9cff2ceae - launch-wizard-8". The left sidebar shows navigation options like EC2 Dashboard, EC2 Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity, and Reservations. The main content area displays the "Details" section with the following information:

Security group name	Security group ID	Description	VPC ID
launch-wizard-8	sg-0a5f05ba9cff2ceae	created 2024-03-30T07:53:23.261Z	vpc-0e008936762c8eb7b
Owner	Inbound rules count	Outbound rules count	
637423623885	1 Permission entry	1 Permission entry	

Below the details, there are tabs for "Inbound rules" (selected), "Outbound rules", and "Tags". The bottom of the page includes standard browser controls and a status bar indicating "ENG IN" and "01:55 PM 30-03-2024".

## Edit inbound rules:

The screenshot shows the AWS EC2 ModifyInboundSecurityGroupRules page. The URL is <https://ap-southeast-1.console.aws.amazon.com/ec2/home?region=ap-southeast-1#ModifyInboundSecurityGroupRules:securityGroup=sg-0a5f05ba9cff2ceae>. The page title is "Edit inbound rules". The left sidebar shows the same navigation as the previous screenshot. The main content area shows the "Inbound rules" table with one rule listed:

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-02bb3b9b50da24aa0	SSH	TCP	22	C... ▾	0.0.0.0/0 X

Below the table is a "Delete" button and an "Add rule" button. The bottom of the page includes standard browser controls and a status bar indicating "ENG IN" and "01:55 PM 30-03-2024".

The screenshot shows the AWS EC2 Security Groups rule editor. It lists two security group rules:

- Rule 1: Type: SSH, Protocol: TCP, Port: 22, Source: 0.0.0.0/0. This rule is highlighted with a blue border.
- Rule 2: Type: HTTP, Protocol: TCP, Port: 80, Source: 150.0.0.0/16. This rule is also highlighted with a blue border.

A yellow warning box at the bottom left states: "⚠ Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only." There is a close button "X" in the top right corner of the warning box.

## Edit security groups in instance2:

The screenshot shows the AWS EC2 Security Groups details page for security group `sg-064305a16ea99358f`. The security group has the following details:

Details			
Security group name	Security group ID	Description	VPC ID
launch-wizard-1	sg-064305a16ea99358f	created 2024-03-30T08:06:30.782Z	vpc-0b7e07648b998366a
Owner	Inbound rules count	Outbound rules count	
637423623885	1 Permission entry	1 Permission entry	

The page also includes tabs for **Inbound rules**, **Outbound rules**, and **Tags**.

## Edit inbound rules:

The screenshot shows the AWS CloudShell interface with the URL [us-west-1.console.aws.amazon.com/ec2/home?region=us-west-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-064...](https://us-west-1.console.aws.amazon.com/ec2/home?region=us-west-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-064...). The page lists two security group rules:

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-0918e73d3f5fbcccd	SSH	TCP	22	C... 0.0.0.0/0	Info
sgr-01ea3f92de972d697	HTTP	TCP	80	C... 160.0.0.0/16	Info

A 'Del' button is present for each rule. At the bottom left, there is a 'Add rule' button.

## Install nginx in instance1:

The screenshot shows the AWS CloudShell interface with the URL [ap-southeast-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=ap-southeast-1&connType=standard&instanceId=i-061ef419cbf7b1209](https://ap-southeast-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=ap-southeast-1&connType=standard&instanceId=i-061ef419cbf7b1209). The terminal output shows the installation of nginx:

```
[root@ip-160-0-0-78 ~]# apt install nginx
-bash: apt: command not found
[root@ip-160-0-0-78 ~]# apt update -y
-bash: apt: command not found
[root@ip-160-0-0-78 ~]# yum install nginx
Amazon Linux 2023 repository                                         50 MB/s | 26 MB   00:00
Amazon Linux 2023 Kernel Livepatch repository                      855 kB/s | 165 kB   00:00
Dependencies resolved.
=====
Package          Architecture      Version       Repository      Size
=====
Installing:
nginx           x86_64          1:1.24.0-1.amzn2023.0.2  amazonlinux    32 k
Installing dependencies:
generic-logos-httd noarch          18.0.0-12.amzn2023.0.3  amazonlinux    19 k
perfetto-tools-libs x86_64          2.9.1-1.amzn2023.0.3   amazonlinux  308 k
=====
i-061ef419cbf7b1209 (inst1)
PublicIPs: 3.1.84.222 PrivateIPs: 160.0.0.78
```

```

Verifying : nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 2/7
Verifying : gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 3/7
Verifying : libunwind-1.4.0-5.amzn2023.0.2.x86_64 4/7
Verifying : nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch 5/7
Verifying : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 6/7
Verifying : nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch 7/7

Installed:
generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch
libunwind-1.4.0-5.amzn2023.0.2.x86_64
nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64
nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch

Complete!
[root@ip-160-0-0-78 ~]# systemctl start nginx
[root@ip-160-0-0-78 ~]#

```

i-061ef419cbf7b1209 (inst1)

Public IPs: 3.1.84.222 Private IPs: 160.0.0.78

## Checking with the private IP of Singapore in California:

```

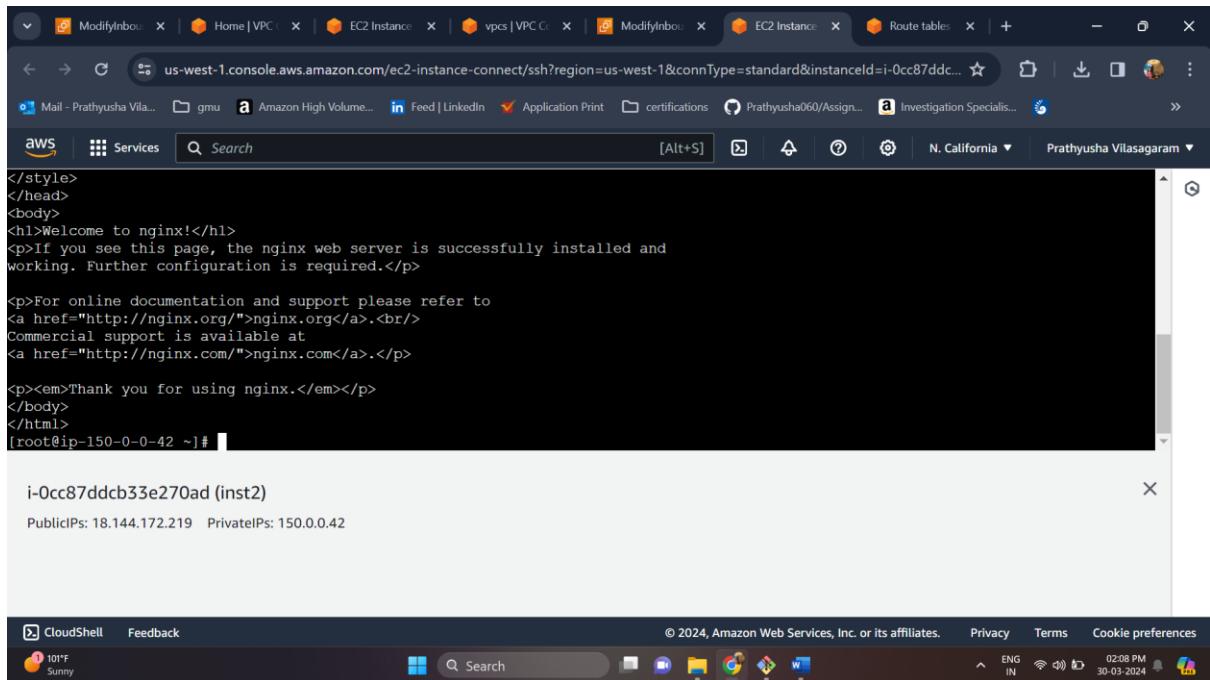
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

Last login: Sat Mar 30 08:15:22 2024 from 13.52.6.116
[ec2-user@ip-150-0-0-42 ~]$ sudo -i
[root@ip-150-0-0-42 ~]# ls
[root@ip-150-0-0-42 ~]# curl 160.0.0.78:80
curl: (7) Failed to connect to 160.0.0.78 port 80 after 170 ms: Couldn't connect to server
[root@ip-150-0-0-42 ~]# curl 160.0.0.78:80

i-0cc87ddcb33e270ad (inst2)

Public IPs: 18.144.172.219 Private IPs: 150.0.0.42

```



```
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
<p>If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.</p>
<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>
<p><em>Thank you for using nginx.</em></p>
</body>
</html>
[root@ip-150-0-0-42 ~]#
```

i-0cc87ddcb33e270ad (inst2)

PublicIPs: 18.144.172.219 PrivateIPs: 150.0.0.42

Thus the peering connection is established between 2 VPC's in different region.