

aws [Alt+S] 22 10 N. Virginia sureshkrishnan2214

VPC > Your VPCs > Create VPC

Create VPC [Info](#)

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances. Mouse over a resource to highlight the related resources.

VPC settings

Resources to create [Info](#)
Choose only the VPC resource or the VPC and other networking resources.

☐ VPC only ☒ VPC and more

Name tag auto-generation [Info](#)
Enter a value for the Name tag. This value will be used to auto-generate Name tags for all resources in the VPC.

☒ Auto-generate

IPv4 CIDR block [Info](#)
Determine the starting IP and the size of your VPC using CIDR notation.

65,536 IPs

CIDR block size must be between /16 and /28.

IPv6 CIDR block [Info](#)
☒ No IPv6 CIDR block
☐ Amazon-provided IPv6 CIDR block

Tenancy [Info](#)

Preview

VPC [Show details](#)
Your AWS virtual network

project-vpc

Subnets (4)
Subnets within this VPC

- us-east-1a
 - project-subnet-public1-us-east-1a
 - project-subnet-private1-us-east-1a
- us-east-1b
 - project-subnet-public2-us-east-1b
 - project-subnet-private2-us-east-1b

Route tables (3)
Route network traffic to resources

- project-rtb-public
- project-rtb-private1-us-east-1a
- project-rtb-private2-us-east-1b

The screenshot shows the AWS Management Console interface for a VPC. At the top, a green banner states: "You successfully created vpc-086a3793b204a244a / my-vpc-guvi". The breadcrumb navigation shows the path: VPC > Your VPCs > vpc-086a3793b204a244a. The main heading is "vpc-086a3793b204a244a / my-vpc-guvi" with an "Actions" dropdown menu.

The "Details" section is divided into four columns:

- VPC ID:** vpc-086a3793b204a244a
- State:** Available
- Block Public Access:** Off
- DNS hostnames:** Disabled
- DNS resolution:** Enabled
- DHCP option set:** dopt-0002729f9ff4c0c07
- Main route table:** rtb-0e91dc2b0f5dc62af
- Main network ACL:** acl-00f4017058016a167
- IPv4 CIDR:** 18.0.0.0/24
- IPv6 pool:** -
- IPv6 CIDR (Network border group):** -
- Network Address Usage metrics:** Disabled
- Route 53 Resolver DNS Firewall rule groups:** -
- Owner ID:** 724727096874

Below the details, there are tabs for "Resource map", "CIDRs", "Flow logs", "Tags", and "Integrations". The "Resource map" tab is selected, showing a section for "VPC" with a "Show details" link and the text "Your AWS virtual network". Other sections visible include "Subnets (0)" with "Subnets within this VPC" and "Route tables (1)" with "Route network traffic to resources".

Creating Internet Gateway:

Internet gateways (1)

Name	Internet gateway ID	State	VPC ID	Owner
-	igw-01a6337b289df717e	Attached	vpc-032d4f8fb33605799	724772096874

Select an internet gateway above

Attach Internet Gateway:

Attach to VPC (igw-00565c75f987d06e3)

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.

Q vpc-086a3793b204a244a

Use: "vpc-086a3793b204a244a"

Cancel Attach internet gateway

Internet gateway igw-00565c75f987d06e3 successfully attached to vpc-086a3793b204a244a

igw-00565c75f987d06e3 / my-igw-guvi

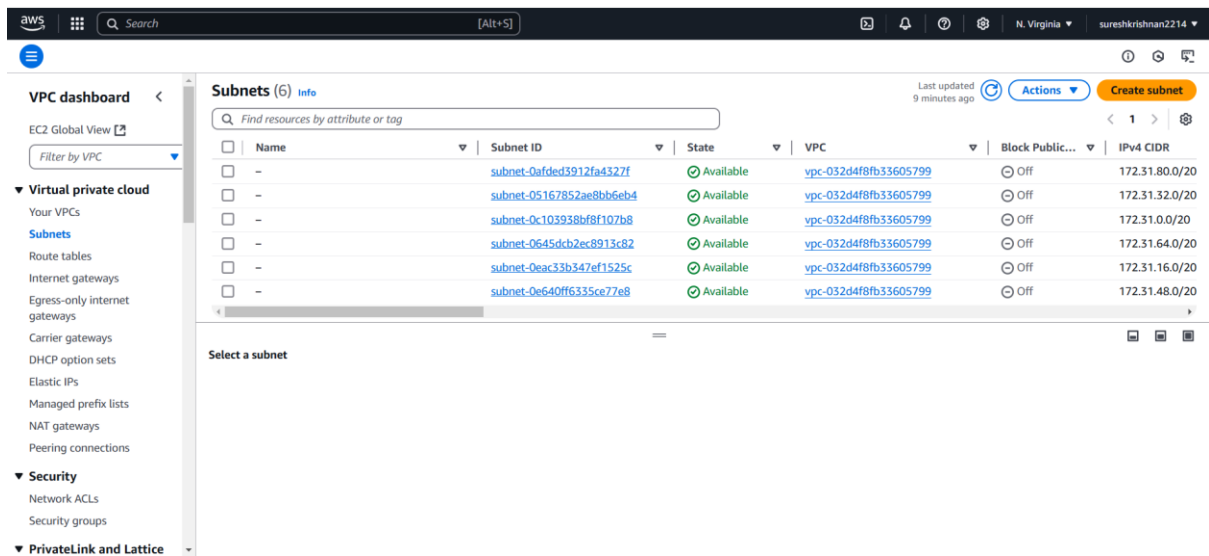
Details

Internet gateway ID	State	VPC ID	Owner
igw-00565c75f987d06e3	Attached	vpc-086a3793b204a244a my-igw-guvi	724772096874

Tags

Key	Value
Name	my-igw-guvi

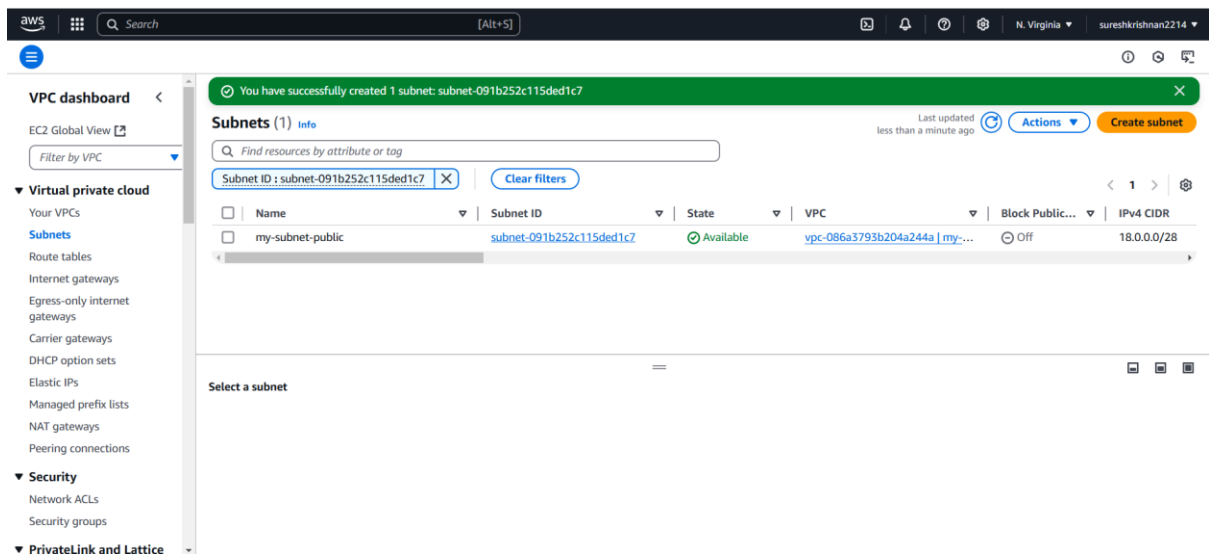
Creating Subnet:



The screenshot shows the AWS VPC console interface. On the left, the 'VPC dashboard' sidebar is visible with categories like 'Virtual private cloud', 'Security', and 'PrivateLink and Lattice'. The main area displays 'Subnets (6)' with a search bar and a table of existing subnets. A 'Create subnet' button is in the top right.

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR
-	subnet-0afded3912fa4327f	Available	vpc-032d4f8fb33605799	Off	172.31.80.0/20
-	subnet-05167852ae8bb6eb4	Available	vpc-032d4f8fb33605799	Off	172.31.32.0/20
-	subnet-0c103938bf8f107b8	Available	vpc-032d4f8fb33605799	Off	172.31.0.0/20
-	subnet-0645dcb2ec8913c82	Available	vpc-032d4f8fb33605799	Off	172.31.64.0/20
-	subnet-0eac33b347ef1525c	Available	vpc-032d4f8fb33605799	Off	172.31.16.0/20
-	subnet-0e640ff6335ce77e8	Available	vpc-032d4f8fb33605799	Off	172.31.48.0/20

Creating – Subnet – Public:



This screenshot shows the AWS VPC console after creating a new public subnet. A green notification banner at the top states: 'You have successfully created 1 subnet: subnet-091b252c115ded1c7'. The 'Subnets (1)' table now contains one entry: 'my-subnet-public' with ID 'subnet-091b252c115ded1c7', which is 'Available' and associated with VPC 'vpc-086a3793b204a244a'. The CIDR block is '18.0.0.0/28'. The 'Block Public...' checkbox is unchecked.

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR
my-subnet-public	subnet-091b252c115ded1c7	Available	vpc-086a3793b204a244a my-...	Off	18.0.0.0/28

Creating – Subnet – Private:

The screenshot shows the AWS VPC dashboard with a notification at the top: "You have successfully created 1 subnet: subnet-0eef7d27e82c67a78". The "Subnets (1)" section displays a table with one entry:

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR
my-subnet-private	subnet-0eef7d27e82c67a78	Available	vpc-086a3793b204a244a my-...	Off	18.0.0.64/28

The left sidebar shows the navigation menu with "Virtual private cloud" expanded, and "Subnets" selected. The "Security" and "PrivateLink and Lattice" sections are also visible.

Subnet Public/Private:

The screenshot shows the AWS VPC dashboard with a notification at the top: "You have successfully created 1 subnet: subnet-0eef7d27e82c67a78". The "Subnets (8)" section displays a table with eight entries:

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR
-	subnet-0c103938bf8f107b8	Available	vpc-032d4f8fb33605799	Off	172.31.0.0/2
-	subnet-0645dcb2ec8913c82	Available	vpc-032d4f8fb33605799	Off	172.31.64.0/
-	subnet-0eac33b347ef1525c	Available	vpc-032d4f8fb33605799	Off	172.31.16.0/
-	subnet-0e640ff6335ce77e8	Available	vpc-032d4f8fb33605799	Off	172.31.48.0/
my-subnet-public	subnet-091b252c115ded1c7	Available	vpc-086a3793b204a244a my-...	Off	18.0.0.0/28
my-subnet-private	subnet-0eef7d27e82c67a78	Available	vpc-086a3793b204a244a my-...	Off	18.0.0.64/28

The left sidebar shows the navigation menu with "Virtual private cloud" expanded, and "Subnets" selected. The "Security" and "PrivateLink and Lattice" sections are also visible.

Creating Route Table:

aws

Search

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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.

my-RT

VPC
The VPC to use for this route table.

vpc-086a3793b204a244a (my-vpc-guvi)

Tags

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

Key

Q Name X

Value - optional

Q my-RT X Remove

Add new tag

You can add 49 more tags.

Cancel Create route table

aws

Search

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VPC > Route tables > rtb-0190b142260700681

VPC dashboard

EC2 Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

NAT gateways

Peering connections

Security

Network ACLs

Security groups

PrivateLink and Lattice

Route table rtb-0190b142260700681 | my-RT was created successfully.

rtb-0190b142260700681 / my-RT

Actions

Details [Info](#)

Route table ID

rtb-0190b142260700681

VPC

vpc-086a3793b204a244a | my-vpc-guvi

Main

No

Owner ID

724772096874

Explicit subnet associations

-

Edge associations

-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (1)

Filter routes

Both

Edit routes

Destination	Target	Status	Propagated
18.0.0/24	local	Active	No

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Assigning Internet access to Route Table:

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VPC > Route tables > rtb-0190b142260700681 > Edit routes

Destination

18.0.0.0/24

0.0.0.0/0

Add route

Target

local

Q local

Internet Gateway

Q igw-00565c75f987d06e3

Use: "igw-00565c75f987d06e3"

igw-00565c75f987d06e3 (my-igw-guvi)

Status

Active

-

Propagated

No

No

Remove

Cancel

Preview

Save changes

CloudShell

Feedback

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VPC > Route tables > rtb-0190b142260700681

VPC dashboard

EC2 Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

NAT gateways

Peering connections

Security

Network ACLs

Security groups

PrivateLink and Lattice

Updated routes for rtb-0190b142260700681 / my-RT successfully

Details

rtb-0190b142260700681 / my-RT

Actions

Details

Route table ID

rtb-0190b142260700681

VPC

vpc-086a3793b204a244a | my-vpc-guvi

Main

No

Owner ID

724772096874

Explicit subnet associations

-

Edge associations

-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Filter routes

Both

Edit routes

Destination	Target	Status	Propagated
0.0.0.0/0	igw-00565c75f987d06e3	Active	No
18.0.0.0/24	local	Active	No

Subnet Association:

aws

Search

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VPC

Route tables

rtb-0190b142260700681

Virtual private cloud

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

NAT gateways

Peering connections

Security

Network ACLs

Security groups

PrivateLink and Lattice

Updated routes for rtb-0190b142260700681 / my-RT successfully

Details

vpc-086a3793b204a244a | my-vpc-guvi

Owner ID

724772096874

Routes

Subnet associations

Edge associations

Route propagation

Tags

Explicit subnet associations (0)

Find subnet association

1

No subnet associations

You do not have any subnet associations.

Subnets without explicit associations (2)

Find subnet association

1

The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
my-subnet-public	subnet-091b252c115ded1c7	18.0.0.0/28	-
my-subnet-private	subnet-0eef7d27e82c67a78	18.0.0.64/28	-

aws

Search

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VPC

Route tables

rtb-0190b142260700681

Virtual private cloud

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

NAT gateways

Peering connections

Security

Network ACLs

Security groups

PrivateLink and Lattice

You have successfully updated subnet associations for rtb-0190b142260700681 / my-RT.

Details

Route table ID

rtb-0190b142260700681

VPC

vpc-086a3793b204a244a | my-vpc-guvi

Main

No

Owner ID

724772096874

Explicit subnet associations

subnet-0eef7d27e82c67a78 / my-subnet-private

Edge associations

-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Explicit subnet associations (1)

Find subnet association

1

my-subnet-private

subnet-0eef7d27e82c67a78

18.0.0.64/28

-

Subnets without explicit associations (1)

Find subnet association

1

The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:

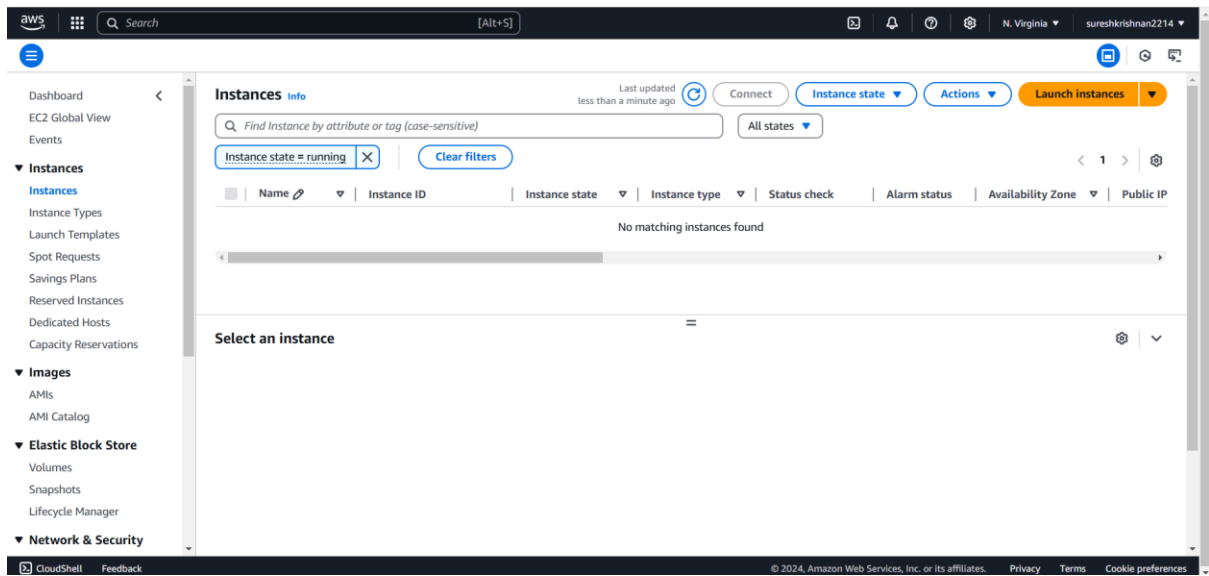
Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
my-subnet-public	subnet-091b252c115ded1c7	18.0.0.0/28	-

CloudShell

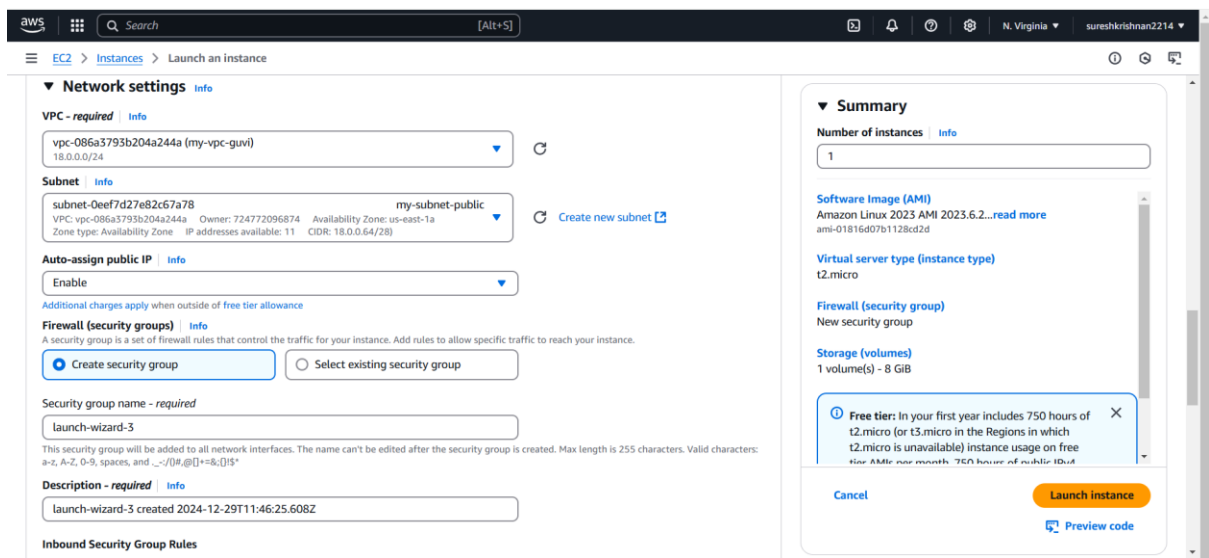
Feedback

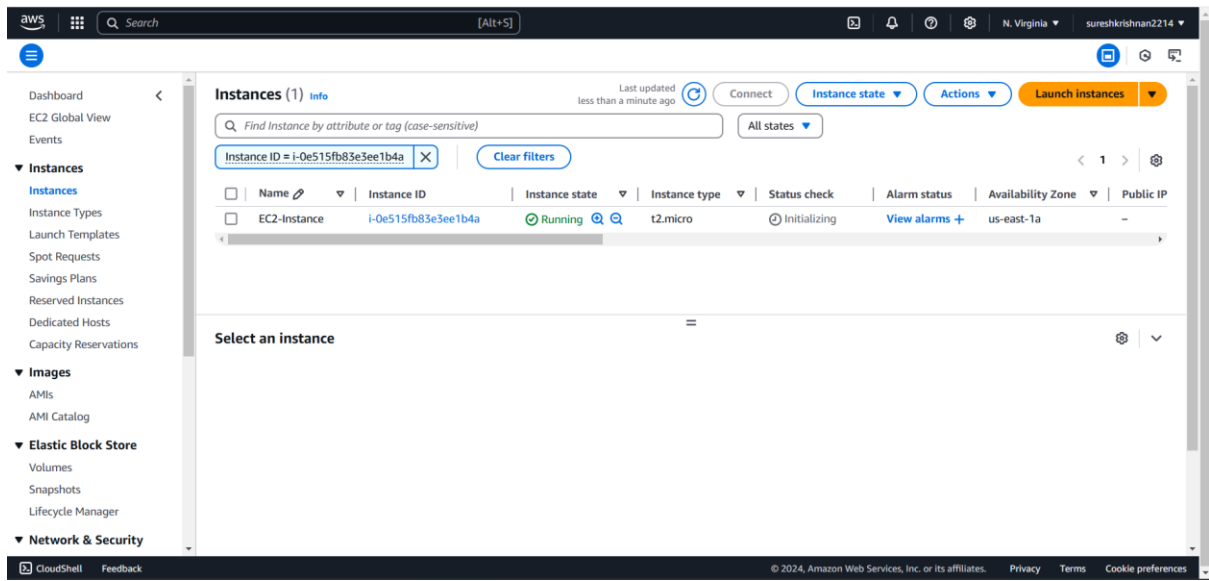
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Creating EC2 Instance:

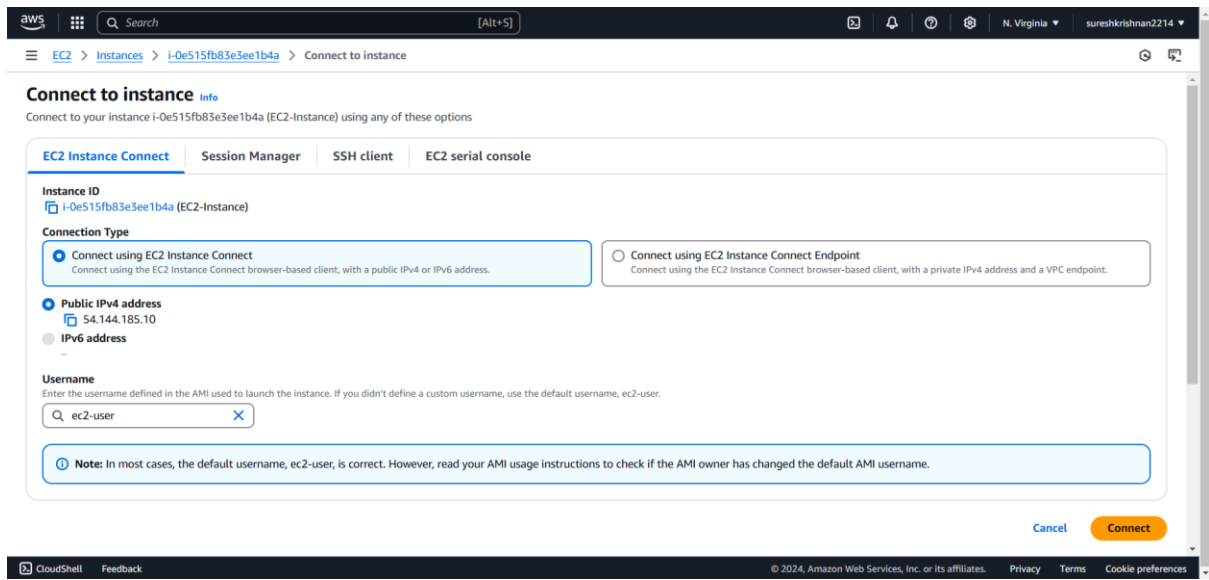


Updating Network settings with created VPC:







Connecting Instance:





Successfully Connected Instance with Public Subnet:







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Amazon Linux 2023

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

[ec2-user@ip-18-0-0-70 ~]$
```

i-Oe515fb83e3ee1b4a (EC2-Instance)

PublicIPs: 54.144.185.10 PrivateIPs: 18.0.0.70