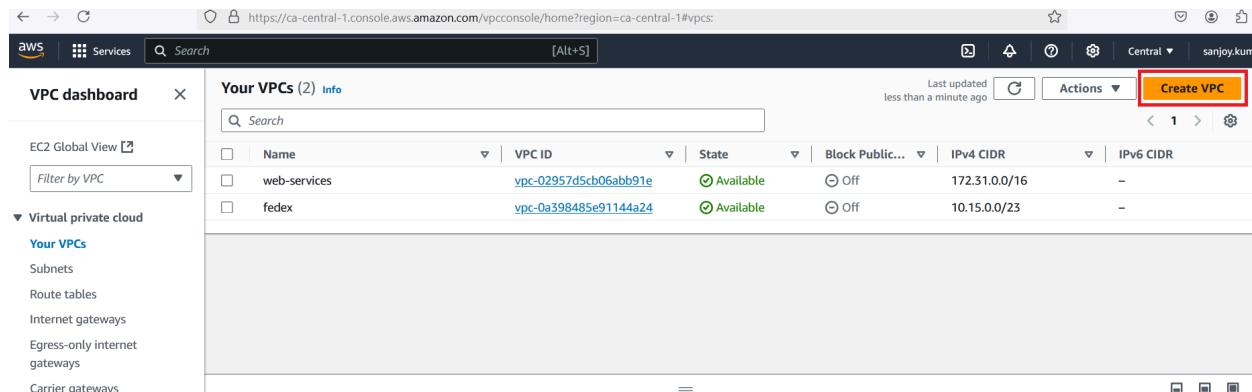
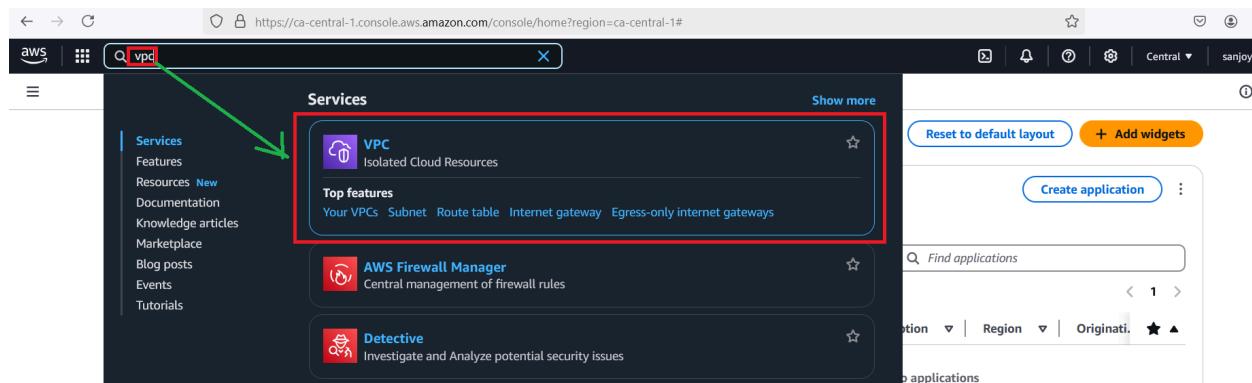


Login to AWS Management Console

1. Go to the [AWS Management Console](#).
 2. Navigate to **VPC** by searching for "VPC" in the services search bar.
-

Step 1: Create a VPC

1. In the VPC Dashboard, click "**Your VPCs**" in the left-hand menu.
2. Click "**Create VPC**".
3. Configure the VPC settings:
 - **Name tag:** (Optional) Provide a name for your VPC (e.g., **fedex-1**).
 - **IPv4 CIDR block:** Specify an IPv4 range (e.g., **10.17.0.0/23**).
 - **IPv6 CIDR block:** Choose an option if you want IPv6 (optional).
 - **Tenancy:** Choose **default** (shared hardware) or **dedicated** (dedicated hardware for your instances).
4. Click "**Create VPC**".



aws | Services Search [Alt+S]

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.

VPC settings

Resources to create Info
Create only the VPC resource or the VPC and other networking resources.

VPC only VPC and more

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

IPv4 CIDR block Info
 IPv4 CIDR manual input IPAM-allocated IPv4 CIDR block

IPv4 CIDR

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

IPv6 CIDR block Info

IPv6 CIDR block [Info](#)

- No IPv6 CIDR block
- 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	Remove tag
<input type="text" value="Name"/>	<input type="text" value="fedex-1"/>	<button style="border: 1px solid #ccc; padding: 2px;">Remove tag</button>
Add tag		
You can add 49 more tags		

Cancel
Preview code
Create VPC

You successfully created **vpc-0c79465789bbdb12d / fedex-1**

[VPC](#) > [Your VPCs](#) > **vpc-0c79465789bbdb12d / fedex-1**

vpc-0c79465789bbdb12d / fedex-1

Details			
VPC ID	State	Block Public Access	DNS hostnames
<input type="text" value="vpc-0c79465789bbdb12d"/>	<input checked="" type="radio"/> Available	<input type="radio"/> Off	Disabled
DNS resolution	default	DHCP option set	Main route table
Enabled		dopt-0645a70bc5986bca6	rtb-090da3c8f7d3ebc27
Main network ACL	Default VPC	IPv4 CIDR	IPv6 pool
acl-011f1fd24ae6d5a1d	No	10.17.0.0/23	-
IPv6 CIDR (Network border group)	Network Address Usage metrics	Route 53 Resolver DNS Firewall rule groups	Owner ID
-	Disabled	-	390402566789

You successfully created **vpc-0c79465789bbdb12d / fedex-1**

Your VPCs (3) Info

Actions	Last updated	Create VPC			
Name	VPC ID	State	Block Public...	IPv4 CIDR	IPv6 CIDR
<input type="checkbox"/>	web-services	<input checked="" type="radio"/> Available	<input type="radio"/> Off	172.31.0.0/16	-
<input type="checkbox"/>	fedex	<input checked="" type="radio"/> Available	<input type="radio"/> Off	10.15.0.0/23	-
<input type="checkbox"/>	fedor-1	<input checked="" type="radio"/> Available	<input type="radio"/> Off	10.17.0.0/23	-

Step 2: Create Subnets

The screenshot shows the AWS VPC dashboard. On the left, there's a sidebar with 'Your VPCs' and 'Subnets' selected. The main area displays a table titled 'Subnets (3)'. The table has columns for Name, Subnet ID, State, VPC, Block Public..., and IPv4 CIDR. The first three rows are available subnets. A red box highlights the 'Create subnet' button at the top right of the table.

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR
-	subnet-0ec3a0500f08940de	Available	vpc-02957d5cb06abb91e web...	Off	172.31.16.0/...
-	subnet-031d85e91f7c9c9de	Available	vpc-02957d5cb06abb91e web...	Off	172.31.0.0/2
-	subnet-02f3816280542a215	Available	vpc-02957d5cb06abb91e web...	Off	172.31.32.0/...

The screenshot shows the 'Create subnet' wizard. It starts with a 'VPC' section where the 'VPC ID' dropdown is set to 'vpc-0c79465789bbdb12d (fedex-1)'. Below it is an 'Associated VPC CIDRs' section with 'IPv4 CIDRs' set to '10.17.0.0/23'. The next section is 'Subnet settings', which asks for CIDR blocks and availability zones. Under 'Subnet 1 of 1', there's a 'Subnet name' field containing 'Public1-fedex-1', which is highlighted with a red box. A note below says '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.

Canada (Central) / ca-central-1a



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.

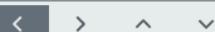
10.17.0.0/23



IPv4 subnet CIDR block

10.17.0.0/25

128 IPs



▼ **Tags - optional**

Key

Name

Value - optional

Public1-fedex-1



Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Subnet 2 of 2

Subnet name

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

Public2-fedex-1

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.

Canada (Central) / ca-central-1b



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.

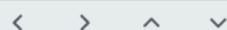
10.17.0.0/23



IPv4 subnet CIDR block

10.17.0.128/25

128 IPs



▼ Tags - optional

Key

Value - optional

Name



Public2-fedex-1



Remove

Add new tag

You can add 49 more tags.

Remove

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.



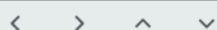
IPv4 VPC CIDR block [Info](#)

Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.



IPv4 subnet CIDR block

128 IPs



▼ Tags - optional

Key

Value - optional

RemoveAdd new tag

You can add 49 more tags.

RemoveAdd new subnet

Subnet 4 of 4

Subnet name

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

Private2-fedex-1

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.

Canada (Central) / ca-central-1b

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.

10.17.0.0/23

IPv4 subnet CIDR block

10.17.1.128/25

128 IPs

▼ Tags - optional

Key

Name

Value - optional

Private2-fedex-1

Remove

Add new tag

You can add 49 more tags.

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

Subnets (4) <small>Info</small>							
<small>Last updated less than a minute ago</small>							
<small>Actions</small> <small>Create subnet</small>							
<small>Show more (+1)</small>							
Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR		
Public2-fedex-1	subnet-0cf30973d99b2102e	Available	vpc-0c79465789bbdb12d fed...	Off	10.17.0.128/25		
Private2-fedex-1	subnet-0f5f233725bec4c3c	Available	vpc-0c79465789bbdb12d fed...	Off	10.17.1.128/25		
Public1-fedex-1	subnet-0911bfcc9d0d5341	Available	vpc-0c79465789bbdb12d fed...	Off	10.17.0.0/25		
Private1-fedex-1	subnet-0f37693e9e921b351	Available	vpc-0c79465789bbdb12d fed...	Off	10.17.1.0/25		

3. Create Route tables:

Default Public Route Table will be created when subnets are created.

The screenshot shows the AWS VPC dashboard with the 'Route tables' section selected. There are two route tables listed:

Name	Route table ID	Explicit subnet assoc...	Edge associations	Main	VPC
-	rtb-090da3c8f7d3ebc27	-	-	Yes	vpc-0c79465789bbdb12d fedex-1
-	rtb-03cc77cfa7963457d	-	-	Yes	vpc-02957d5cb06abb91e web-serv

A red box highlights the first route table entry.

Just rename the default one.

The screenshot shows the AWS VPC dashboard with the 'Route tables' section selected. The first route table has been renamed to 'PublicRouteTable-fedex-1'. The second route table remains unchanged.

Name	Route table ID	Explicit subnet assoc...	Edge associations	Main	VPC
PublicRouteTable-fedex-1	rtb-090da3c8f7d3ebc27	-	-	Yes	vpc-0c79465789bbdb12d fedex-1
-	rtb-03cc77cfa7963457d	-	-	Yes	vpc-02957d5cb06abb91e web-serv

Create private route table

The screenshot shows the AWS VPC dashboard with the 'Route tables' section selected. A yellow box highlights the 'Create route table' button in the top right corner of the table header. Below the table, the details for the first route table are visible.

Name	Route table ID	Explicit subnet assoc...	Edge associations	Main	VPC
PublicRouteTable-fedex-1	rtb-090da3c8f7d3ebc27	-	-	Yes	vpc-0c79465789bbdb12d fedex-1
-	rtb-03cc77cfa7963457d	-	-	Yes	vpc-02957d5cb06abb91e web-serv

rtb-090da3c8f7d3ebc27 / PublicRouteTable-fedex-1

Details | Routes | Subnet associations | Edge associations | Route propagation | Tags

AWS Services Search [Alt+S]

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 - <i>optional</i>
<input type="text" value="Name"/>	<input type="text" value="PrivateRouteTable-fedex-1"/>

You can add 49 more tags.

AWS Services Search [Alt+S]

VPC dashboard > Route tables > rtb-07507b7ad82a8a6e1 / PrivateRouteTable-fedex-1

Route table ID: rtb-07507b7ad82a8a6e1 | PrivateRouteTable-fedex-1 was created successfully.

Details Info

Route table ID <input type="text" value="rtb-07507b7ad82a8a6e1"/>	Main <input type="checkbox"/>	Explicit subnet associations -	Edge associations -
VPC <input type="text" value="vpc-0c79465789bbdb12d fedex-1"/>	Owner ID <input type="text" value="390402566789"/>		

Routes (1)

Destination	Target	Status	Propagated
10.17.0.0/23	local	<input checked="" type="radio"/> Active	No

Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
PublicRouteTable-fedex-1	rtb-090da3c8f7d3ebc27	-	-	Yes	vpc-0c79465789bbdb12d fedex-1
-	rtb-03cc77cfa7963457d	-	-	Yes	vpc-02957d5cb06abb91e w
PrivateRouteTable-fedex-1	rtb-07507b7ad82a8a6e1	-	-	No	vpc-0c79465789bbdb12d fr

4. Subnets association with the Route tables:

Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
PublicRouteTable-fedex-1	rtb-090da3c8f7d3ebc27	-	-	Yes	vpc-0c79465789bbdb12d fedex-1
-	rtb-03cc77cfa7963457d	-	-	Yes	vpc-02957d5cb06abb91e w
PrivateRouteTable-fedex-1	rtb-07507b7ad82a8a6e1	-	-	No	vpc-0c79465789bbdb12d fr

rtb-090da3c8f7d3ebc27 / PublicRouteTable-fedex-1

Details | Routes | **Subnet associations** | Edge associations | Route propagation | Tags

Explicit subnet associations (0)

[Edit subnet associations](#)

VPC > Route tables > [rtb-090da3c8f7d3ebc27](#) > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/4)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/> Public2-fedex-1	subnet-0cf30973d99b2102e	10.17.0.128/25	-	Main (rtb-090da3c8f7d3ebc27 / Public...)
<input type="checkbox"/> Private2-fedex-1	subnet-0f5f233725bec4c3c	10.17.1.128/25	-	Main (rtb-090da3c8f7d3ebc27 / Public...)
<input checked="" type="checkbox"/> Public1-fedex-1	subnet-0911bfccf9d0d5341	10.17.0.0/25	-	Main (rtb-090da3c8f7d3ebc27 / Public...)
<input type="checkbox"/> Private1-fedex-1	subnet-0f37693e9e921b351	10.17.1.0/25	-	Main (rtb-090da3c8f7d3ebc27 / Public...)

Selected subnets

[subnet-0cf30973d99b2102e / Public2-fedex-1](#) [subnet-0911bfccf9d0d5341 / Public1-fedex-1](#)

[Cancel](#) **Save associations**

VPC dashboard

Route tables (1/3) Info

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
<input checked="" type="checkbox"/> PublicRouteTable-fedex-1	rtb-090da3c8f7d3ebc27	2 subnets	-	Yes	vpc-0c79465789bbdb12d
<input type="checkbox"/> -	rtb-03cc77cfa7963457d	-	-	Yes	vpc-02957d5cb06abb91e
<input type="checkbox"/> PrivateRouteTable-fedex-1	rtb-07507b7ad82a8a6e1	-	-	No	vpc-0c79465789bbdb12d

rtb-090da3c8f7d3ebc27 / PublicRouteTable-fedex-1

Details | **Routes** | **Subnet associations** | **Edge associations** | **Route propagation** | **Tags**

Do the same process for private subnets association with private route table

VPC dashboard

Route tables (1/3) Info

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
<input type="checkbox"/> PublicRouteTable-fedex-1	rtb-090da3c8f7d3ebc27	2 subnets	-	Yes	vpc-0c79465789bbdb12d
<input type="checkbox"/> -	rtb-03cc77cfa7963457d	-	-	Yes	vpc-02957d5cb06abb91e
<input checked="" type="checkbox"/> PrivateRouteTable-fedex-1	rtb-07507b7ad82a8a6e1	2 subnets	-	No	vpc-0c79465789bbdb12d

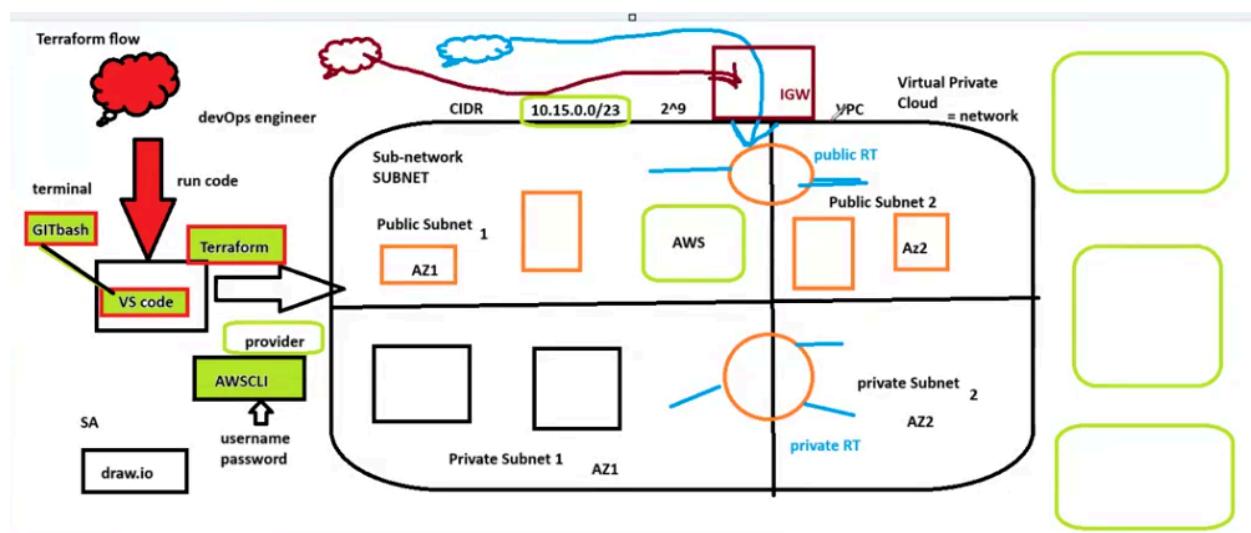
rtb-07507b7ad82a8a6e1 / PrivateRouteTable-fedex-1

Details | **Routes** | **Subnet associations** | **Edge associations** | **Route propagation** | **Tags**

Explicit subnet associations (2)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
Private2-fedex-1	subnet-0f5f233725bec4c3c	10.17.1.128/25	-
Private1-fedex-1	subnet-0f37693e9e921b551	10.17.1.0/25	-

5. Create Internet gateways:



Internet gateways (1) Info						
Actions Create internet gateway						
Search						
Name	Internet gateway ID	State	VPC ID	Owner		
-	igw-027e3be2238cafe7b	Attached	vpc-02957d5cb06abb91e web-services	390402566789		

Select an internet gateway above

aws Services [Search](#) [Alt+S]

[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	Remove
<input type="text" value="Name"/>	<input type="text" value="fedex-1-igw"/>	Remove

[Add new tag](#)
You can add 49 more tags.

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

VPC dashboard

The following internet gateway was created: igw-02c4a72f2126ee23f - fedex-1-igw. You can now attach to a VPC to enable the VPC to communicate with the internet.

EC2 Global View

Filter by VPC

Virtual private cloud

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Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

NAT gateways

Details Info

Internet gateway ID: igw-02c4a72f2126ee23f

State: Detached

VPC ID: -

Owner: 390402566789

Actions ▾

Attach to VPC

Detach from VPC

Manage tags

Delete

Tags

Search tags

Key: Name Value: fedex-1-igw

Manage tags

aws Services Search [Alt+S]

VPC > Internet gateways > Attach to VPC (igw-02c4a72f2126ee23f)

Attach to VPC (igw-02c4a72f2126ee23f) Info

VPC

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

Available VPCs

Attach the internet gateway to this VPC.

Select a VPC

vpc-0c79465789bbdb12d - fedex-1

AWS Command Line Interface command

vpc-0c79465789bbdb12d - fedex-1

Cancel **Attach internet gateway**

aws Services Search [Alt+S]

VPC > Internet gateways > Attach to VPC (igw-02c4a72f2126ee23f)

Attach to VPC (igw-02c4a72f2126ee23f) Info

VPC

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

Available VPCs

Attach the internet gateway to this VPC.

Select a VPC

vpc-0c79465789bbdb12d

AWS Command Line Interface command

Cancel **Attach internet gateway**

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

Internet gateway igw-02c4a72f2126ee23f successfully attached to vpc-0c79465789bbdb12d

igw-02c4a72f2126ee23f / fedex-1-igw

Details Info

Internet gateway ID	igw-02c4a72f2126ee23f	State	Attached
VPC ID	vpc-0c79465789bbdb12d fedex-1	Owner	390402566789

Tags

Key	Value
Name	fedor-1-igw

Actions ▾

VPC dashboard

EC2 Global View ▾ Filter by VPC ▾

Virtual private cloud

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

Route tables (1/3) Info

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
<input checked="" type="checkbox"/> PublicRouteTable-fedor-1	rtb-090da3c8f7d3ebc27	2 subnets	-	Yes	vpc-0c79465789bbdb12d fedex-1
<input type="checkbox"/> -	rtb-05cc77cfa7963457d	-	-	Yes	vpc-02957d5cb06abb91e w
<input type="checkbox"/> PrivateRouteTable-fedor-1	rtb-07507b7ad82a8a6e1	2 subnets	-	No	vpc-0c79465789bbdb12d fedex-1

Last updated 21 minutes ago

rtb-090da3c8f7d3ebc27 / PublicRouteTable-fedor-1

Details Routes Subnet associations Edge associations Route propagation Tags

Routes (1)

Destination	Target	Status	Propagated
10.17.0.0/23	local	Active	No

Both ▾ **Edit routes**

VPC > **Route tables** > **rtb-090da3c8f7d3ebc27** > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.17.0.0/23	local	Active	No

Add route

Cancel Preview Save changes

VPC > **Route tables** > **rtb-090da3c8f7d3ebc27** > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.17.0.0/23	local	Active	No

Add route

0.0.0.0/0 **Internet Gateway** igw-02c4a72f2126ee23f Use: "igw-02c4a72f2126ee23f" **igw-02c4a72f2126ee23f (fedor-1-igw)**

Cancel Preview Save changes

AWS Services Search [Alt+S]

VPC > Route tables > rtb-090da3c8f7d3ebc27 > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.17.0.0/23	local	Active	No
0.0.0.0/0	Internet Gateway	-	No
igw-02c4a72f2126ee23f			

Add route Cancel Preview Save changes

AWS Services Search [Alt+S]

VPC dashboard > Updated routes for rtb-090da3c8f7d3ebc27 / PublicRouteTable-fedex-1 successfully

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

rtb-090da3c8f7d3ebc27 / PublicRouteTable-fedex-1

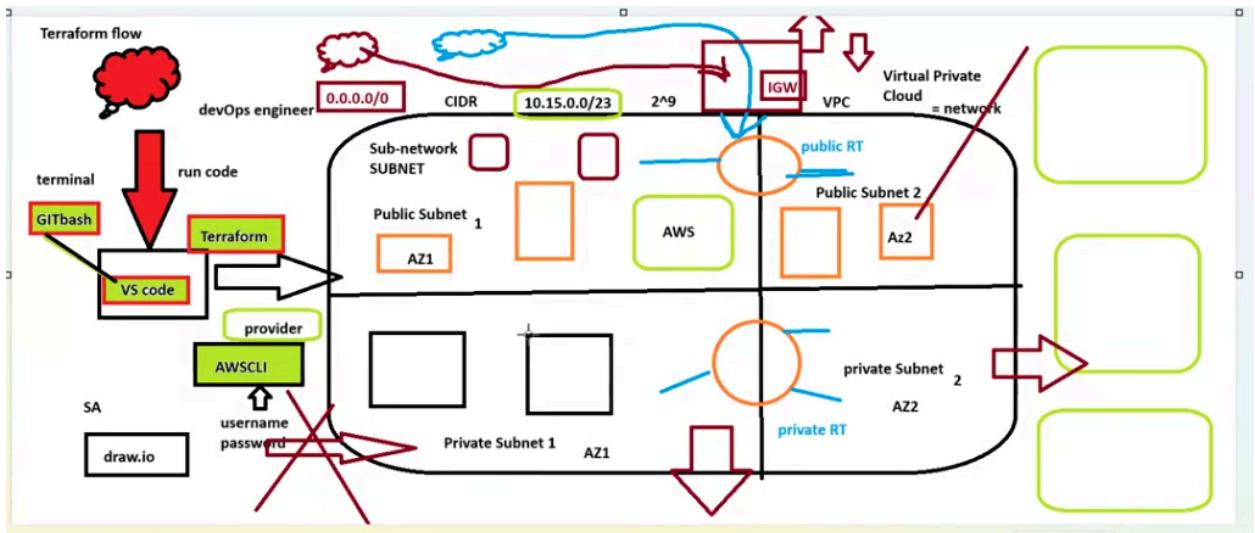
Details Info

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-090da3c8f7d3ebc27	Yes	2 subnets	-
VPC	Owner ID		
vpc-0c79465789bbdb12d fedex-1	390402566789		

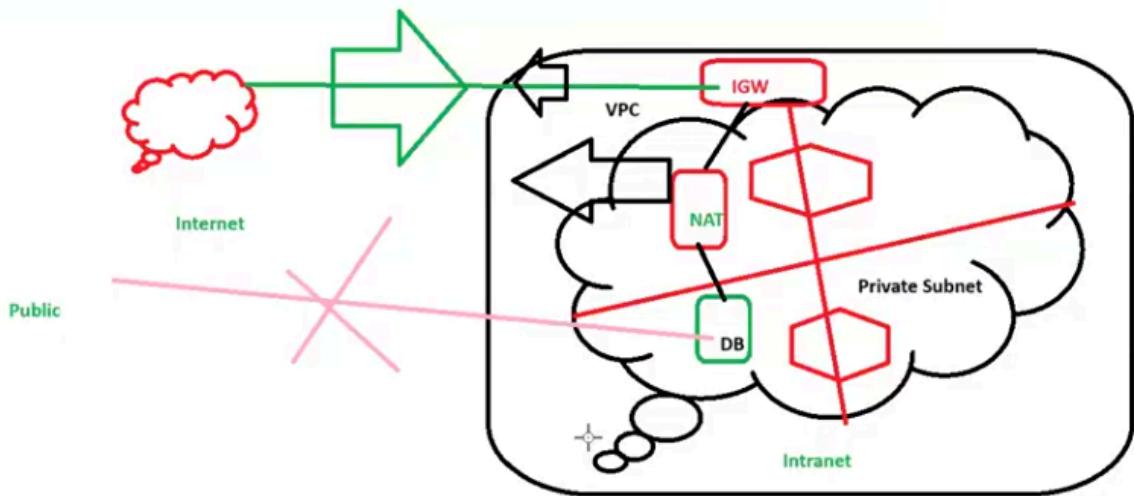
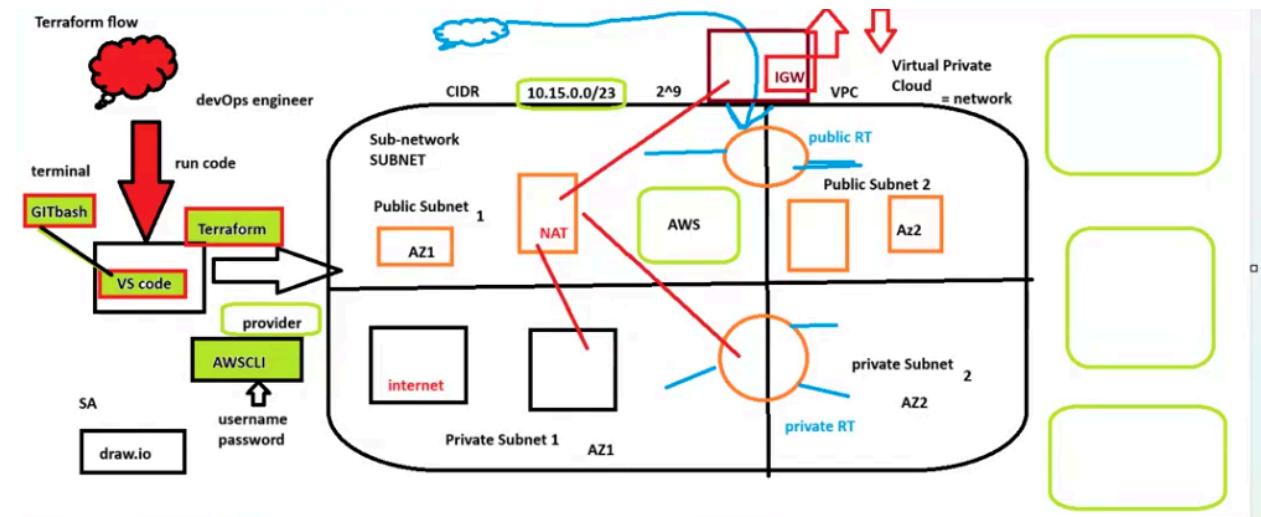
Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Destination	Target	Status	Propagated
0.0.0.0/0	igw-02c4a72f2126ee23f	Active	No
10.17.0.0/23	local	Active	No



NAT gateway should be created inside the Public subnet for allowing outgoing internet traffic for private subnets.



VPC dashboard

EC2 Global View

Virtual private cloud

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NAT gateways

Peering connections

Updated routes for rtb-090da3c8f7d3ebc27 / PublicRouteTable-fedex-1 successfully

Create NAT gateway

NB: It will charge extra. So if you don't need the NAT gateway after testing, please delete it.

VPC > NAT gateways > Create NAT gateway

Create NAT gateway Info

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

NAT gateway settings

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

The name can be up to 256 characters long.

Subnet
Select a subnet in which to create the NAT gateway.

Connectivity type
Select a connectivity type for the NAT gateway.
 Public
 Private

Elastic IP allocation ID Info
Assign an Elastic IP address to the NAT gateway.

► Additional settings Info

▶ Additional settings [Info](#)

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
<input type="text" value="Name"/> X	<input type="text" value="fedex-1-nat"/> X
Remove	
Add new tag	
You can add 49 more tags.	

[Cancel](#) [Create NAT gateway](#)

NAT gateway nat-065a2c634198b0acd | fedex-1-nat was created successfully.

[VPC](#) > [NAT gateways](#) > nat-065a2c634198b0acd

nat-065a2c634198b0acd / fedex-1-nat

[Actions](#)

Details			
NAT gateway ID nat-065a2c634198b0acd	Connectivity type Public	State Pending	State message Info -
NAT gateway ARN arn:aws:ec2:central-1:390402566789:natgateway/nat-065a2c634198b0acd	Primary public IPv4 address -	Primary private IPv4 address -	Primary network interface ID -
VPC vpc-0c79465789bbdb12d / fedex-1	Subnet subnet-0911bfccf9d0d5341 / Public1-fedex-1	Created Monday, December 16, 2024 at 01:11:09 EST	Deleted -

[Secondary IPv4 addresses](#) [Monitoring](#) [Tags](#)

[Edit secondary IPv4 address associations](#)

Route tables (1/3) [Info](#)

Last updated less than a minute ago

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

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
PublicRouteTable-fedex-1	rtb-090da3c8f7d3ebc27	2 subnets	-	Yes	vpc-0c79465789bbdb12d
<input checked="" type="checkbox"/> PrivateRouteTable-fedex-1	rtb-03cc77cfaf963457d	-	-	Yes	vpc-02957d5cb06abb91e
<input checked="" type="checkbox"/> PrivateRouteTable-fedex-1	rtb-07507b7ad82a8a6e1	2 subnets	-	No	vpc-0c79465789bbdb12d

[rtb-07507b7ad82a8a6e1 / PrivateRouteTable-fedex-1](#)

[Details](#) [Routes](#) [Subnet associations](#) [Edge associations](#) [Route propagation](#) [Tags](#)

[Edit routes](#)

Routes (1)	
Filter routes	Both
Destination	Target
10.17.0.0/23	local
	Active
	Propagated
	No

AWS Services Search [Alt+S] Central sanjoy.ku

VPC > Route tables > rtb-07507b7ad82a8a6e1 > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.17.0.0/23	local	Active	No
	<input type="text"/> local		

Add route

Cancel Preview Save changes

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VPC > Route tables > rtb-07507b7ad82a8a6e1 > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.17.0.0/23	local	Active	No
0.0.0.0/0	NAT Gateway	-	No
	<input type="text"/> nat-		
	nat-065a2c634198b0acd (fedex-1-nat)		

Add route

nat-065a2c634198b0acd (fedex-1-nat)

Cancel Preview Save changes

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VPC dashboard > Updated routes for rtb-07507b7ad82a8a6e1 / PrivateRouteTable-fedex-1 successfully

Details

VPC > Route tables > rtb-07507b7ad82a8a6e1 / PrivateRouteTable-fedex-1

Actions

Details

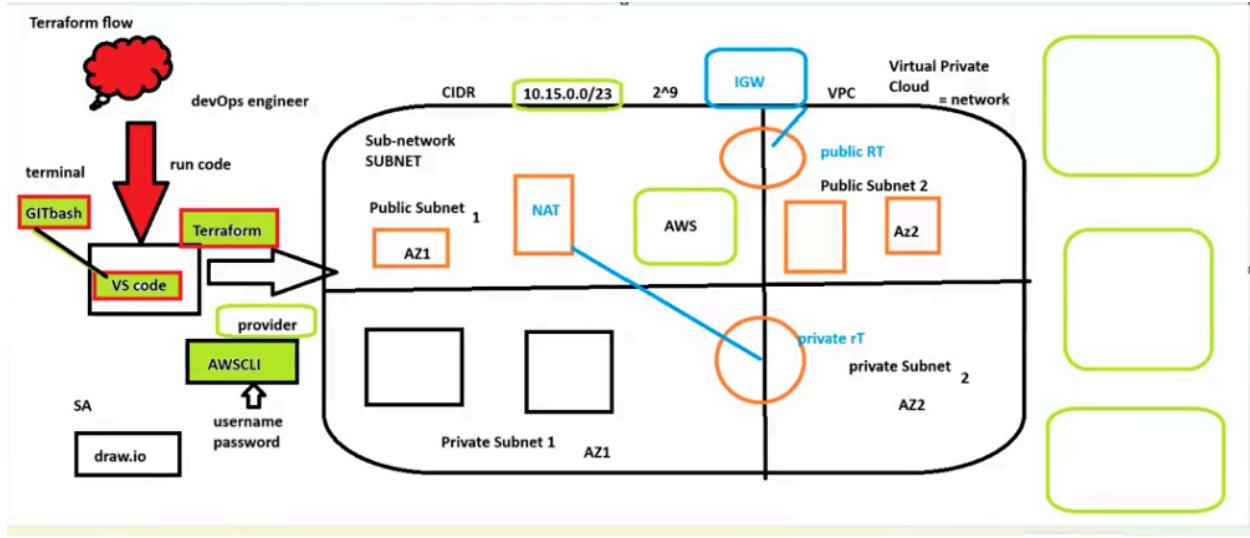
Route table ID rtb-07507b7ad82a8a6e1	Main No	Explicit subnet associations 2 subnets	Edge associations -
VPC vpc-0c79465789bbdb12d fedex-1	Owner ID 390402566789		

Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Destination	Target	Status	Propagated
0.0.0.0/0	nat-065a2c634198b0acd	Active	No
10.17.0.0/23	local	Active	No

Both Edit routes



Troubleshooting:

If we delete the NAT gateway intentionally or accidentally, the private networks will not be connected with the Internet for outgoing traffic. The status is showing Blackhole.

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
PublicRouteTable-fedex-1	rtb-090da3c8f7d3ebc27	2 subnets	-	Yes	vpc-0c79465789bbdb12d
-	rtb-03cc77cfa7963457d	-	-	Yes	vpc-02957d5cb0abb91e
PrivateRouteTable-fedex-1	rtb-07507b7ad82a8a6e1	2 subnets	-	No	vpc-0c79465789bbdb12d

Destination	Target	Status	Propagated
0.0.0.0/0	nat-065a2c634198b0acd	Blackhole	No
10.17.0.0/23	local	Active	No

Why Use a NAT Gateway?

A NAT Gateway is used in AWS to allow instances in a private subnet to:

1. Access the internet (e.g., for software updates, external APIs).
2. Access AWS services (e.g., S3, DynamoDB) while remaining isolated from inbound internet traffic.

How It Works:

- Private instances route outbound traffic to the NAT Gateway via a route table.
- The NAT Gateway translates private IPs to a public IP and forwards traffic to the internet.
- It blocks inbound traffic, keeping the private subnet secure.