



Andhra Pradesh State Skill Development Corporation



AWS CLOUD COMPUTING

CONFIGURATION OF AMAZON VIRTUAL PRIVATE CLOUD



Configuration of Amazon Virtual Private Cloud





Configuration of Amazon Virtual Private Cloud (VPC)

Amazon Virtual Private Cloud (Amazon VPC) lets you provision a logically isolated section of the Amazon Web Services (AWS) cloud where you can launch AWS resources in a virtual network that you define. You have complete control over your virtual networking environment, including selection of your own IP address range, creation of subnets, and configuration of route tables and network gateways. You can use both IPv4 and IPv6 in your VPC for secure and easy access to resources and applications. You can easily customize the network configuration for your Amazon Virtual Private Cloud.

For example, you can create a public-facing subnet for your web servers that has access to the Internet, and place your backend systems such as databases or application servers in a private-facing subnet with no Internet access. You can leverage multiple layers of security, including security groups and network access control lists, to help control access to Amazon EC2 instances in each subnet.

Subnetwork or subnet is a logical subdivision of an IP network. The practice of dividing a network into two or more networks is called subnetting. AWS provides two types of subnetting one is Public which allows the internet to access the machine and another is private which is hidden from the internet.

Internet gateway is a horizontally scaled, redundant, and highly available VPC component that allows communication between instances in your VPC and the internet. An internet gateway serves two purposes: to provide a target in your VPC route tables for internet-routable traffic and to perform network address translation (NAT) for instances that have been assigned public IPv4 addresses.

Route tables contain a set of rules, called routes, that are used to determine where network traffic is directed. Each subnet in your VPC must be associated with a route table; the table controls the routing for the subnet. A subnet can only be associated with one route table at a time, but you can associate multiple subnets with the same route table.

Features and Benefits

- Multiple Connectivity Options
- Secure
- Simple
- Use All the Scalability and Reliability of AWS

Use Cases

- Host a simple, public-facing website
- Host multi-tier web applications
- Host scalable web applications in the AWS cloud that are connected to your
- Datacentre
- Extend your corporate network into the cloud
- Disaster Recovery



To Create your own VPC

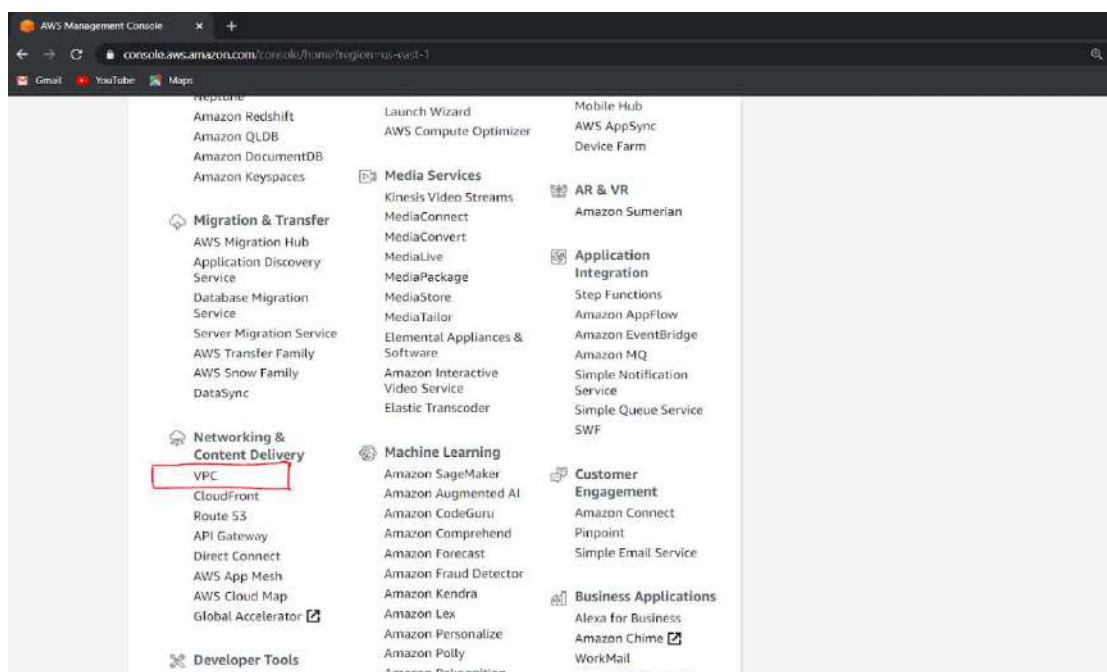
Amazon VPC enables you to launch AWS resources into a virtual network that you've defined.

Open AWS console

Click on Services

Select Networking and Content Delivery

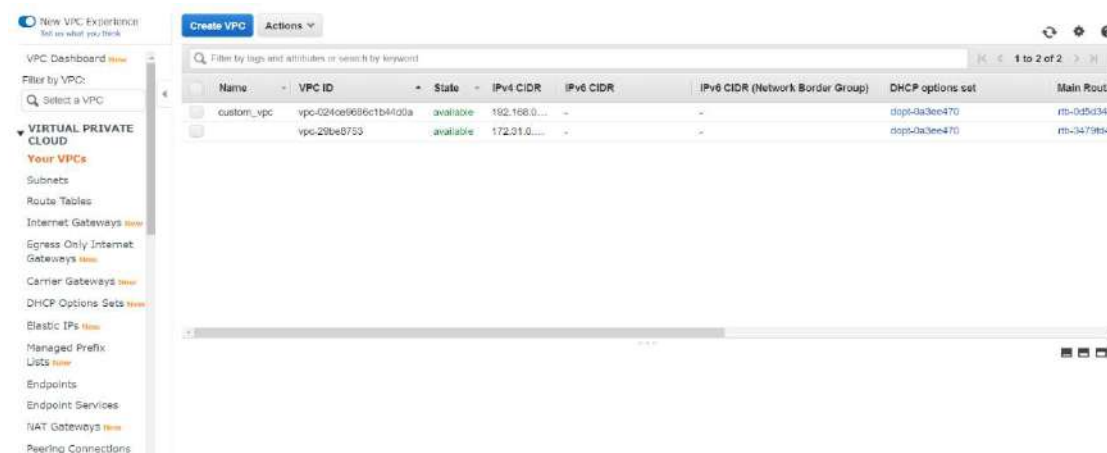
Click on VPC



On VPC Dashboard panel

Click on Your VPC

Click on Create VPC button





Click on “Create VPC”, page
For Name tag → Example_VPC
For IPv4 CIDR block → 192.168.0.0/16
Click on “Create” button

VPCs > Create VPC

Create VPC

A VPC is an isolated portion of the AWS cloud populated by AWS objects, such as Amazon EC2 instances. You must specify an IPv4 address range for your VPC. Specify the IPv4 address range as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. You cannot specify an IPv4 CIDR block larger than /16. You can optionally associate an IPv6 CIDR block with the VPC.

Name tag

IPv4 CIDR block*

IPv6 CIDR block ☒ No IPv6 CIDR Block ☐ Amazon provided IPv6 CIDR block ☐ IPv6 CIDR owned by me

Tenancy

* Required

Cancel Create

Verify
Example_VPC was created

Filter by tags and attributes or search by keyword

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	IPv6 CIDR (Network Border Group)	DHCP options set
custom_vpc	vpc-024ce9686c1b44d0a	available	192.168.0...	-	-	dopt-0a3ee470
Example_V...	vpc-07340cd7e97a5edc7	available	192.168.0...	-	-	dopt-0a3ee470
vpc-2f0e8753	vpc-2f0e8753	available	172.31.0...	-	-	dopt-0a3ee470

VPC: vpc-07340cd7e97a5edc7

Description	CIDR Blocks	Flow Logs	Tags
VPC ID	vpc-07340cd7e97a5edc7	Tenancy	default
State	available	Default VPC	No
IPv4 CIDR	192.168.0.0/16	Classic link	Disabled

To Create public subnet
Click on Subnet
Click on Create Subnet button



Subnets

Name	Subnet ID	State	VPC	IPv4 CIDR	Available IPv4	IPv6 CIDR	Availab
private_sub...	subnet-0072056573f02a155	available	vpc-024ce9688c1b44d0a ...	192.168.2.0/24	251	-	us-east-
public_subnet	subnet-087748441c996e036	available	vpc-024ce9688c1b44d0a ...	192.168.1.0/24	250	-	us-east-
	subnet-107d9076	available	vpc-29be8753	172.31.0.0/20	4091	-	us-east-
	subnet-368331e	available	vpc-29be8753	172.31.80.0/20	4091	-	us-east-
	subnet-53865fd	available	vpc-29be8753	172.31.64.0/20	4091	-	us-east-
	subnet-6baa7826	available	vpc-29be8753	172.31.16.0/20	4091	-	us-east-
	subnet-890a3ab7	available	vpc-29be8753	172.31.48.0/20	4090	-	us-east-
	subnet-f7e20ba8	available	vpc-29be8753	172.31.32.0/20	4090	-	us-east-

On Create Subnet, page

For Name tag → Example_pub_sub

For VPC → Example_VPC

For IPv4 CIDR block → 192.168.10.0/24

Click on Create button

Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.

Name tag:

VPC:

Availability Zone:

VPC CIDRs	CIDR	Status	Status Reason
	192.168.0.0/16	associated	

IPv4 CIDR block:

* Required

[Cancel](#) [Create](#)

Verify

Example_pub_sub got created



Subnet List:

Name	Subnet ID	State	VPC	IPv4 CIDR	Available IPv4	IPv6 CIDR	Availab
private_sub...	subnet-0072056573f02a155	available	vpc-024ce9686c1b44d9a...	192.168.2.0/24	251	-	us-east-
public_subnet	subnet-087748441c995e036	available	vpc-024ce9686c1b44d9a...	192.168.1.0/24	250	-	us-east-
Example_p...	subnet-09392dc8f3064d6dc	available	vpc-07340cf7e97a5edc7 ...	192.168.10.0/...	251	-	us-east-
subnet-107d9076	subnet-107d9076	available	vpc-29be8753	172.31.0.0/20	4091	-	us-east-
subnet-3bd8331e	subnet-3bd8331e	available	vpc-29be8753	172.31.80.0/20	4091	-	us-east-
subnet-53f95f5d	subnet-53f95f5d	available	vpc-29be8753	172.31.64.0/20	4091	-	us-east-
subnet-6baa1626	subnet-6baa1626	available	vpc-29be8753	172.31.16.0/20	4091	-	us-east-
subnet-890a3ab7	subnet-890a3ab7	available	vpc-29be8753	172.31.48.0/20	4090	-	us-east-
subnet-f7e20ba8	subnet-f7e20ba8	available	vpc-29be8753	172.31.32.0/20	4090	-	us-east-

Subnet Details:

Subnet ID	Subnet ID	State
subnet-09392dc8f3064d6dc	subnet-09392dc8f3064d6dc	available

VPC: vpc-07340cf7e97a5edc7 | Example_VPC

Available IPv4 Addresses: 251

IPv4 CIDR: 192.168.10.0/24

IPv6 CIDR: -

To Create private subnet

Click on Subnet

Click on Create subnet button

Subnet List:

Name	Subnet ID	State	VPC	IPv4 CIDR	Available IPv4	IPv6 CIDR	Availab
private_sub...	subnet-0072056573f02a155	available	vpc-024ce9686c1b44d9a...	192.168.2.0/24	251	-	us-east-
public_subnet	subnet-087748441c995e036	available	vpc-024ce9686c1b44d9a...	192.168.1.0/24	250	-	us-east-
Example_p...	subnet-09392dc8f3064d6dc	available	vpc-07340cf7e97a5edc7 ...	192.168.10.0/...	251	-	us-east-
subnet-107d9076	subnet-107d9076	available	vpc-29be8753	172.31.0.0/20	4091	-	us-east-
subnet-3bd8331e	subnet-3bd8331e	available	vpc-29be8753	172.31.80.0/20	4091	-	us-east-
subnet-53f95f5d	subnet-53f95f5d	available	vpc-29be8753	172.31.64.0/20	4091	-	us-east-
subnet-6baa1626	subnet-6baa1626	available	vpc-29be8753	172.31.16.0/20	4091	-	us-east-
subnet-890a3ab7	subnet-890a3ab7	available	vpc-29be8753	172.31.48.0/20	4090	-	us-east-
subnet-f7e20ba8	subnet-f7e20ba8	available	vpc-29be8753	172.31.32.0/20	4090	-	us-east-

Subnet Details:

Subnet ID	Subnet ID	State
subnet-09392dc8f3064d6dc	subnet-09392dc8f3064d6dc	available

VPC: vpc-07340cf7e97a5edc7 | Example_VPC

Available IPv4 Addresses: 251

IPv4 CIDR: 192.168.10.0/24

IPv6 CIDR: -



On create subnet page

For Name tag → Example_pvt_sub
For VPC → Example_VPC
For IPv4 CIDR block → 192.168.20.0/24

Click on Create button

aws Services Resource Groups

Subnets > Create subnet

Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.

Name tag: Example_pvt-sub

VPC: vpc-07340d7e97a5edc7

Availability Zone: No preference

VPC CIDRs:

CIDR	Status	Status Reason
192.168.0.0/16	associated	

IPv4 CIDR block: 192.168.20.0/24

* Required

Cancel Create

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Verify

Example_pvt_sub got created

aws Services Resource Groups

New VPC Experience

VPC Dashboard

Filter by VPC:

Select a VPC

VIRTUAL PRIVATE CLOUD

Your VPCs

Subnets

Route Tables

Internet Gateways

Egress Only Internet Gateways

Carrier Gateways

DHCP Options Sets

Elastic IPs

Managed Prefix Lists

Endpoints

Endpoint Services

Create subnet Actions

Filter by tags and attributes or search by keyword

Name	Subnet ID	State	VPC	IPv4 CIDR	Available IPv4	IPv6 CIDR
private_subnet	subnet-0072066673102a155	available	vpc-0240a9686c1b44d0a...	192.168.2.0/24	251	-
Example_pvt_sub	subnet-0514b44283ab799f	available	vpc-07340d7e97a5edc7	192.168.20.0/24	251	-
public_subnet	subnet-067748441c695a036	available	vpc-0240a9686c1b44d0a...	192.168.1.0/24	250	-
Example_pub_subnet	subnet-09092dc8f30f4d6dc	available	vpc-07340d7e97a5edc7	192.168.10.0/24	251	-
	subnet-10749c76	available	vpc-29be8753	172.31.0.0/20	4091	-
	subnet-3fd8331e	available	vpc-29be8753	172.31.80.0/20	4091	-
	subnet-5395f5d	available	vpc-29be8753	172.31.64.0/20	4091	-
	subnet-6baa1626	available	vpc-29be8753	172.31.16.0/20	4091	-
	subnet-890a3ab7	available	vpc-29be8753	172.31.48.0/20	4090	-

Subnet: subnet-0514b44283ab799f

Description Flow Logs Route Table Network ACL Tags Sharing

Subnet ID: subnet-0514b44283ab799f State: available

VPC: vpc-07340d7e97a5edc7 | Example_VPC IPv4 CIDR: 192.168.20.0/24

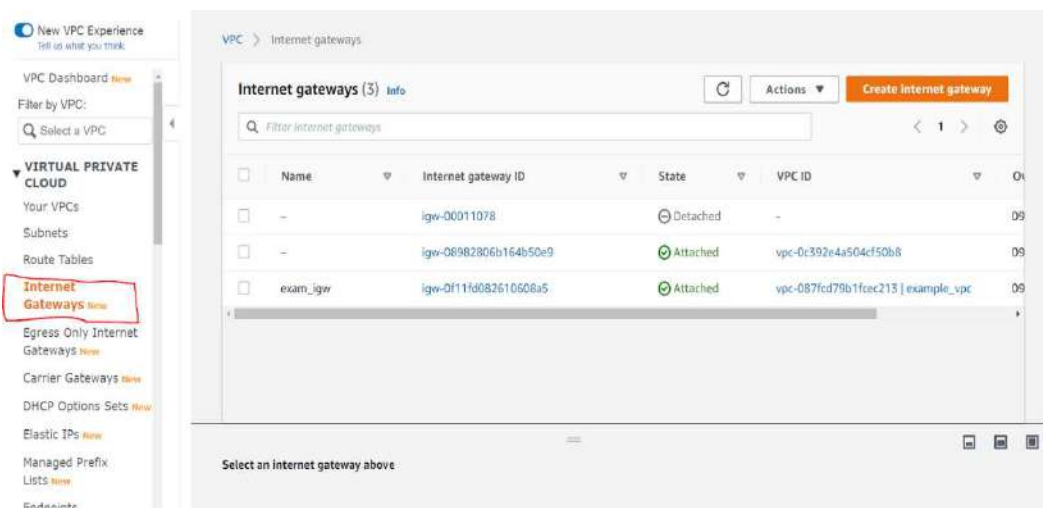
Available IPv4 Addresses: 251 IPv6 CIDR: -

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Create an Internet gateway and attach to your VPC

In VPC Dashboard panel

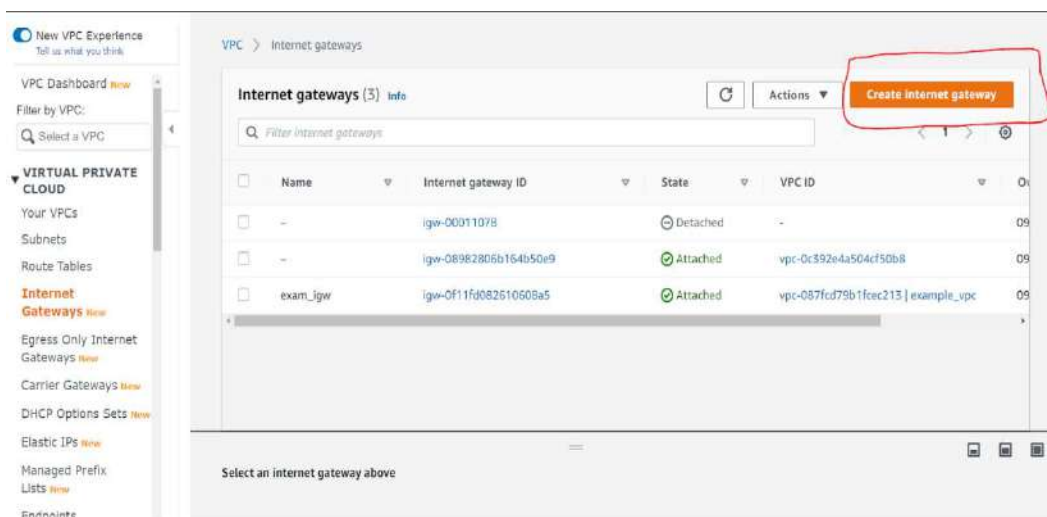
Click on Internet Gateways



Internet gateways (3) info

Name	Internet gateway ID	State	VPC ID
-	igw-00011078	Detached	-
-	igw-08982806b164b50e9	Attached	vpc-0c392e4a504cf50b8
exam_igw	igw-0f11fd082610508a5	Attached	vpc-087fcd79b1fcec213 example_vpc

Click on Create Internet Gateway button



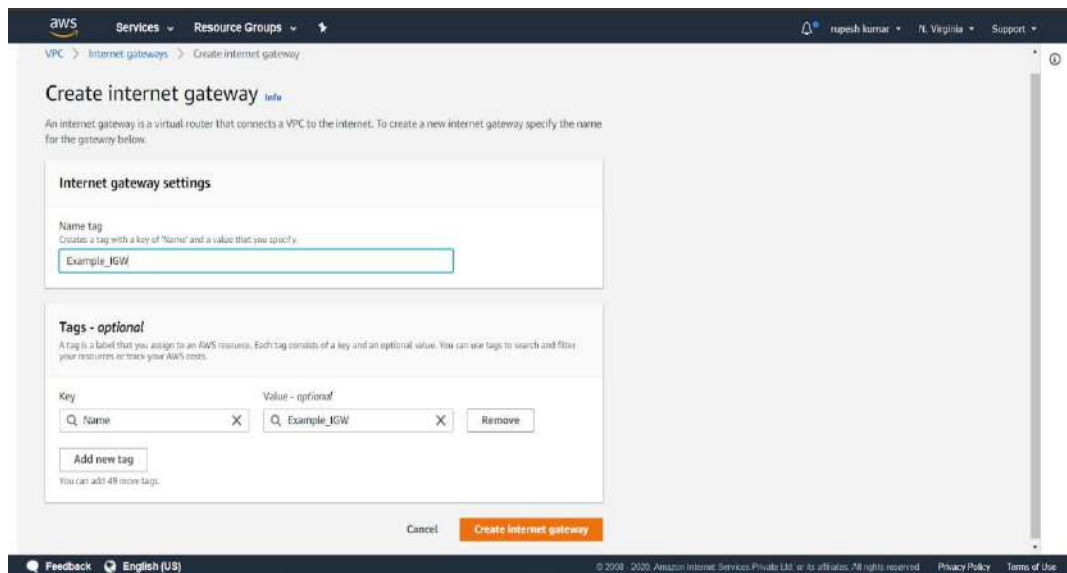
Internet gateways (3) info

Name	Internet gateway ID	State	VPC ID
-	igw-00011078	Detached	-
-	igw-08982806b164b50e9	Attached	vpc-0c392e4a504cf50b8
exam_igw	igw-0f11fd082610508a5	Attached	vpc-087fcd79b1fcec213 example_vpc

In Create Internet Gateway, box

For Name tag → Example_IGW

Click on “Create internet gateway” button



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.

Example_IGW

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.

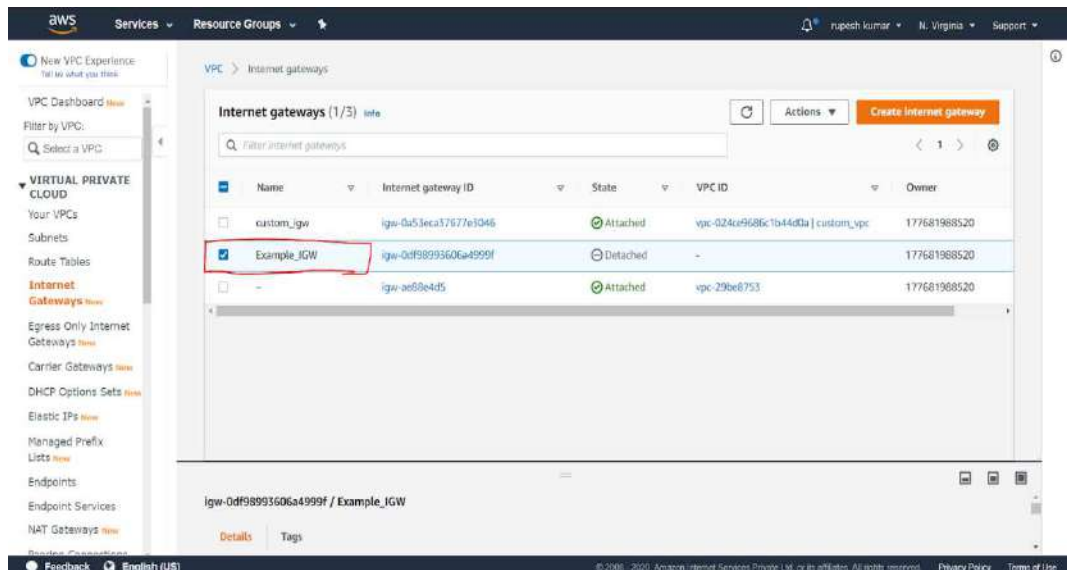
Key: Name Value - optional: Example_IGW Remove

Add new tag
You can add 49 more tags.

Cancel Create internet gateway

Verify

Internet gateway is created



Internet gateways (1/3) Info

Filter internet gateways

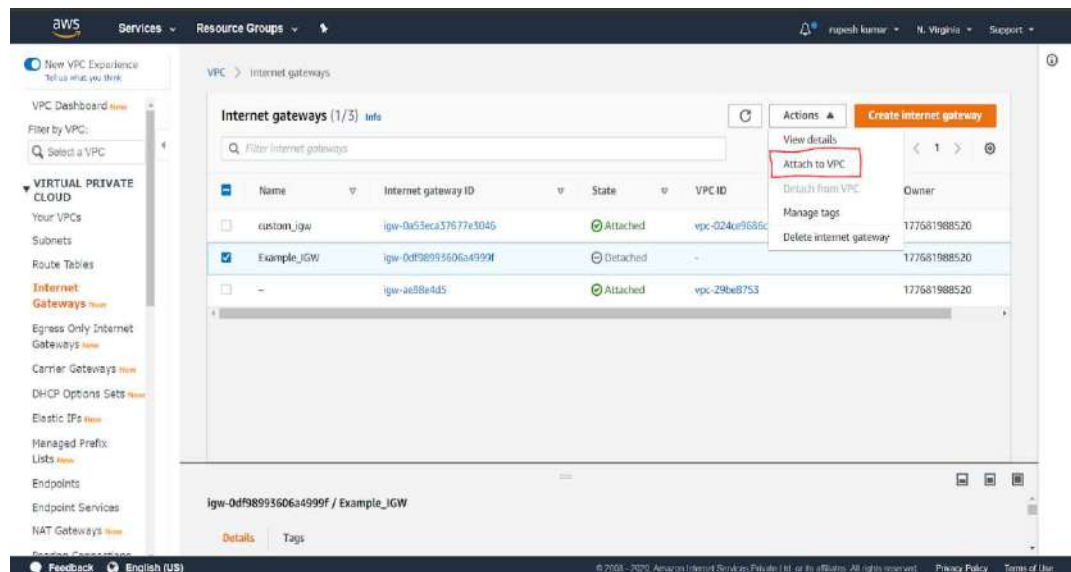
	Name	Internet gateway ID	State	VPC ID	Owner
<input type="checkbox"/>	custom_igw	igw-0a53eca37677e3046	Attached	vpc-024ca9686c1b44d0a custom_vpc	177681968520
<input checked="" type="checkbox"/>	Example_IGW	igw-0df9893606a4999f	Detached	-	177681968520
<input type="checkbox"/>	-	igw-ae58e4d5	Attached	vpc-29be6753	177681968520

igw-0df9893606a4999f / Example_IGW

Details Tags

Select Example_IGW

Click on actions and select option “ Attach to VPC”



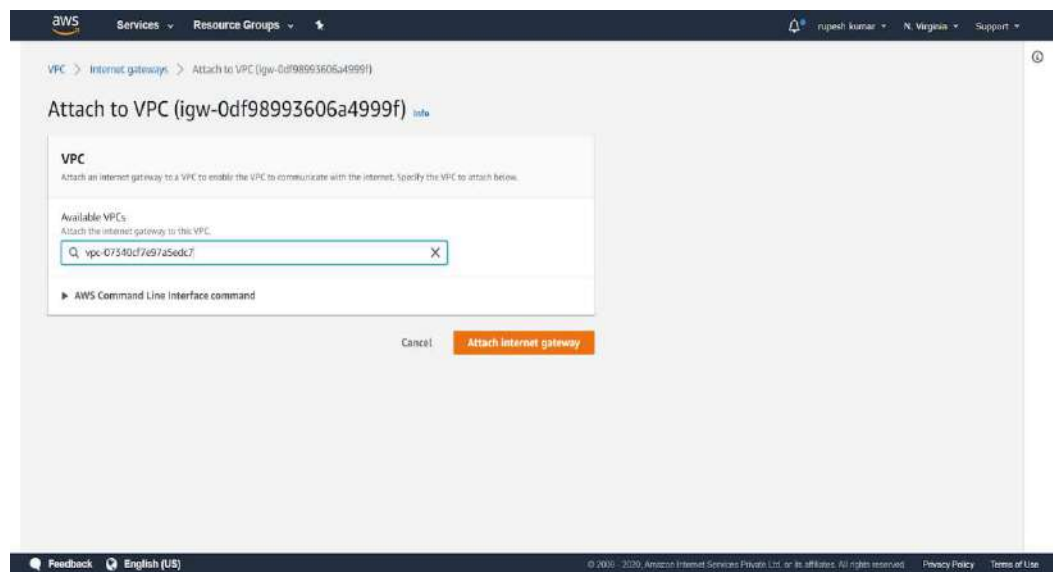
The screenshot shows the AWS Management Console interface. On the left, the 'VIRTUAL PRIVATE CLOUD' section is expanded, showing 'Internet Gateways'. The main panel displays a table of Internet Gateways. The gateway 'Example_IGW' (ID: igw-0df98993606a4999f) is selected. The 'Actions' menu is open, and the 'Attach to VPC' option is highlighted. The table lists the following gateways:

Name	Internet gateway ID	State	VPC ID	Owner
custom_igw	igw-0a53eca37677e3046	Attached	vpc-024a93685c	177581988520
Example_IGW	igw-0df98993606a4999f	Detached	-	177581988520
-	igw-aeb8e4d5	Attached	vpc-29be8753	177581988520

In “Attach to VPC” box

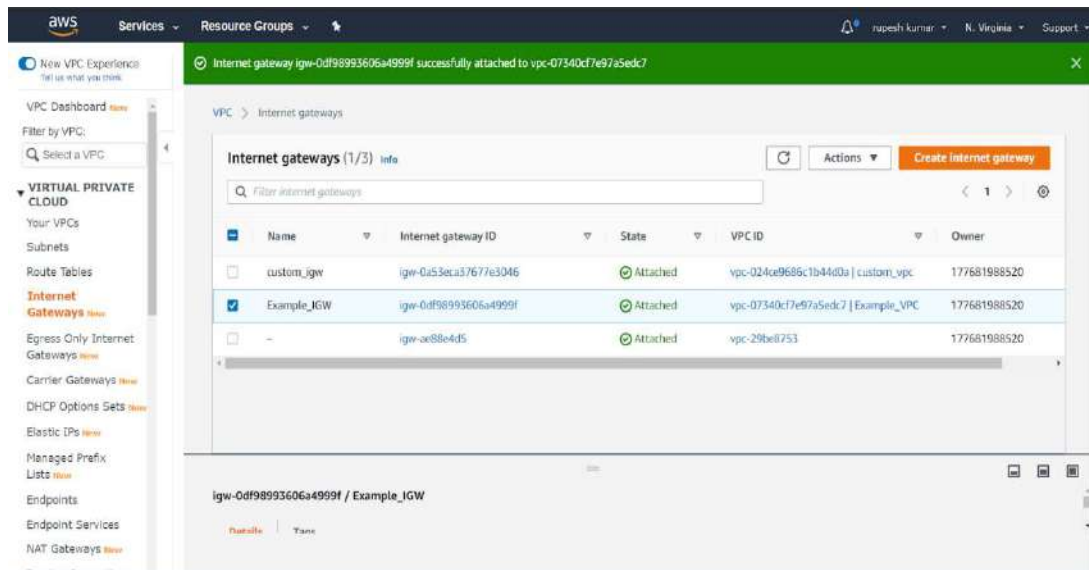
For VPC -> Example_VPC

Click on “Attach internet gateway” button



The screenshot shows the 'Attach to VPC' dialog box for the selected Internet Gateway. The dialog prompts the user to attach the gateway to a VPC. The 'Available VPCs' section shows a search bar with the text 'vpc-07340d7e97a5edc7'. The 'Attach internet gateway' button is highlighted in orange.

Verify
Internet gateway is connected to your VPC

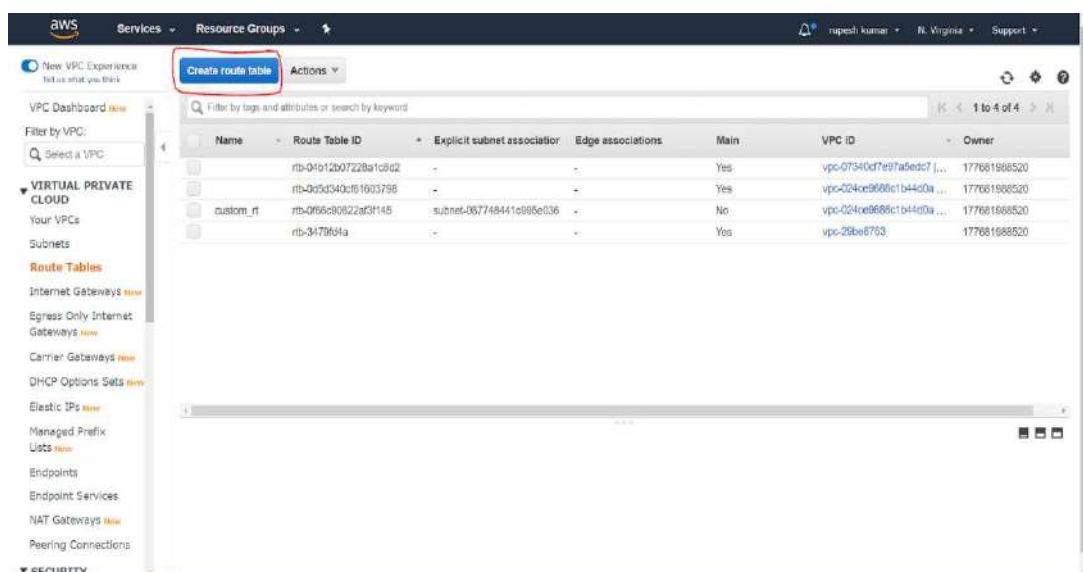


Create Public Routing Table, associate subnet and add routing rules

On VPC Dashboard panel

Click on Route Table

Click on “Create Route Table” button





On “Create Route Table” box
For Name tag → Example_pub_rt
For VPC → Example_VPC
Click on “Create” button

Route Tables > Create route table

Create route table

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

Name tag: Example_pub_rt

VPC: vpc-07340cd7e97a5e0c7

Key (128 characters maximum) Value (256 characters maximum)

This resource currently has no tags.

Add Tag 50 remaining (Up to 50 tags maximum)

* Required

Cancel Create

Verify
Example_pub_rt table is created

aws Services Resource Groups

Filter by tags and attributes or search by keyword

Name	Route Table ID	Explicit subnet association	Edge associations	Main	VPC ID	Owner
Example_pub_rt	rtb-01a2e79e45c259516	-	-	No	vpc-07340cd7e97a5e0c7 [...]	1776819885
	rtb-04b12b07228a1c8d2	-	-	Yes	vpc-07340cd7e97a5e0c7 [...]	1776819885
	rtb-0c5d340c161603798	-	-	Yes	vpc-024ce9886c1b443da ...	1776819885
custom_rt	rtb-0f66c90822a3f145	subnet-087748441c995e036	-	No	vpc-024ce9886c1b443da ...	1776819885
	rtb-347964a	-	-	Yes	vpc-29be8753	1776819885

Route Table: rtb-01a2e79e45c259516

Summary Routes Subnet Associations Edge Associations Route Propagation Tags

Route Table ID: rtb-01a2e79e45c259516

Main: No

Explicitly Associated with: -

Owner: 1776819885

VPC: vpc-07340cd7e97a5e0c7 | Example_VPC

Click on “Subnet Association” button

The screenshot shows the AWS VPC console interface. On the left sidebar, the 'Route Tables' link is highlighted. The main content area displays a list of route tables. The 'Example_pub_rt' route table is selected. Below the list, the 'Subnet Associations' tab is highlighted, showing details for the selected route table.

Name	Route Table ID	Explicit subnet association	Edge associations	Main	VPC ID	Owner
Example_pub_rt	rtb-01a2e79e45c259510	-	-	No	vpc-07340d7e97a5edc7	1776819885
	rtb-04b12b07228a1c8d2	-	-	Yes	vpc-07340d7e97a5edc7	1776819885
	rtb-0d5d340c81603798	-	-	Yes	vpc-024ce9686c1b44d0a	1776819885
custom_rt	rtb-086c99822a3f145	subnet-087748441c995e036	-	No	vpc-024ce9686c1b44d0a	1776819885
	rtb-3479b94a	-	-	Yes	vpc-28be8753	1776819885

Route Table: rtb-01a2e79e45c259510

Summary | Routes | **Subnet Associations** | Edge Associations | Route Propagation | Tags

Route Table ID: rtb-01a2e79e45c259510
Main: No
Explicitly Associated with: VPC vpc-07340d7e97a5edc7 (Example_VPC)
Owner: 177681988520

Click on Edit subnet association button

The screenshot shows the AWS VPC console interface. The 'Subnet Associations' tab is selected for the route table. The 'Edit subnet associations' button is highlighted. Below the button, a table shows the current subnet associations, which are empty.

Name	Route Table ID	Explicit subnet association	Edge associations	Main	VPC ID	Owner
Example_pub_rt	rtb-01a2e79e45c259516	-	-	No	vpc-07340d7e97a5edc7	1776819885
	rtb-04b12b07228a1c8d2	-	-	Yes	vpc-07340d7e97a5edc7	1776819885
	rtb-0d5d340c81603798	-	-	Yes	vpc-024ce9686c1b44d0a	1776819885
custom_rt	rtb-086c99822a3f145	subnet-087748441c995e036	-	No	vpc-024ce9686c1b44d0a	1776819885
	rtb-3479b94a	-	-	Yes	vpc-28be8753	1776819885

Route Table: rtb-01a2e79e45c259516

Summary | Routes | **Subnet Associations** | Edge Associations | Route Propagation | Tags

Edit subnet associations

Subnet ID	IPv4 CIDR	IPv6 CIDR
You do not have any subnet associations.		

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

Select checkbox of Example_pub_sub → 192.168.10.0/24



Click on save button

Route table: rtb-01a2e79e45c259516 (Example_pub_rt)

Associated subnets: subnet-09392dc8f3064d8dc

Subnet ID	IPv4 CIDR	IPv6 CIDR	Current Route Table
subnet-0514b442839ab799f Example_priv_sub	192.168.20.0/...	-	Main
subnet-09392dc8f3064d8dc Example_pub_subnet	192.168.10.0/...	-	Main

* Required

Cancel Save

Verify

Example_pub_subnet is associated with routing table

Route Tables

Name	Route Table ID	Explicit subnet associations	Edge associations	Main	VPC ID
Example_pub_rt	rtb-01a2e79e45c259516	subnet-09392dc8f3064d8dc	-	No	vpc-07340cd7e87a5e0c7
	rtb-04b12b07228a1c8d2	-	-	Yes	vpc-07340cd7e87a5e0c7
	rtb-0d5c340cf61603798	-	-	Yes	vpc-024ce9689c1b44d0a
custom_rt	rtb-086690822a0f145	subnet-087748441c895e036	-	No	vpc-024ce9689c1b44d0a
	rtb-3478f4a	-	-	Yes	vpc-29ce8753

Route Table: rtb-01a2e79e45c259516

Subnet Associations

Subnet ID	IPv4 CIDR	IPv6 CIDR
subnet-09392dc8f3064d8...	192.168.10.0/24	-

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

Click on Route button



Click on Edit button

The screenshot shows the AWS VPC console interface. On the left sidebar, under 'VIRTUAL PRIVATE CLOUD', the 'Route Tables' link is selected. The main panel displays a list of route tables. The first route table, 'Example_pub_rt', is selected. Below the list, the 'Routes' tab is active, and the 'Edit routes' button is highlighted with a red box. The route table details show a single route with destination '192.168.0.0/16' and target 'local'.

Click on “Add route” button

The screenshot shows the 'Edit routes' page for the selected route table. It displays a table with columns: Destination, Target, Status, and Propagated. The existing route is shown with destination '192.168.0.0/16' and target 'local'. At the bottom left, the 'Add route' button is highlighted with a red box. At the bottom right, there are 'Cancel' and 'Save routes' buttons.

For Destination → 0.0.0.0/0
For Target → select Example_IGW

Click on Save button



Route Tables > Edit routes

Edit routes

Destination	Target	Status	Propagated
192.168.0.0/16	local	active	No
0.0.0.0/0	igw-0d58993006a4980f		No

Add route

* Required

Cancel Save routes

Verification

Public route is added through internet gateway

Verify

Status column show Active

aws Services Resource Groups

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New VPC Experience

VPC Dashboard

Filter by VPC: Select a VPC

VIRTUAL PRIVATE CLOUD

Your VPCs

Subnets

Route Tables

Internet Gateways

Egress Only Internet Gateways

Carrier Gateways

DHCP Options Sets

Elastic IPs

Managed Prefix Lists

Endpoints

Endpoint Services

NAT Gateways

Peering Connections

Create route table Actions

Filter by tags and attributes or search by keyword

Name	Route Table ID	Explicit subnet associations	Edge associations	Main	VPC ID	Owner
Example_pub_rt	rtb-01a2e79e45c259516	subnet-09392dc8f0306495dc	-	No	vpc-07340cd7e97a5edc7	1776f
	rtb-04b12607228a1c8d2	-	-	Yes	vpc-07340cd7e97a5edc7	1776f
	rtb-0d5d340d9f160379b	-	-	Yes	vpc-024ce9086c1b4403a	1776f
custom_rt	rtb-0f6dc50822a3f145	subnet-087748441c995e036	-	No	vpc-024ce9086c1b4403a	1776f
	rtb-3479834a	-	-	Yes	vpc-28be0753	1776f

Route Table: rtb-01a2e79e45c259516

Summary Routes Subnet Associations Edge Associations Route Propagation Tags

Edit routes

View All routes

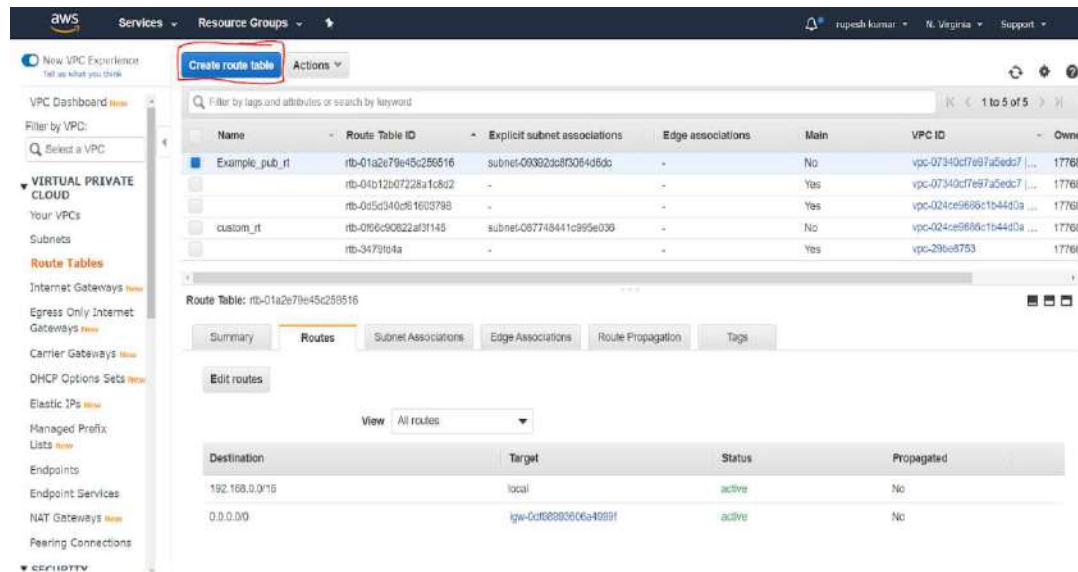
Destination	Target	Status	Propagated
192.168.0.0/16	local	active	No
0.0.0.0/0	igw-0d58993006a4980f	active	No

Create Private Routing Table, associate subnet and add routing rules

On VPC Dashboard panel

Select Route table

Click on “Create Route Table”



The screenshot shows the AWS VPC console interface. In the left-hand navigation pane, the 'Create route table' button is highlighted with a red box. The main content area displays a table of existing route tables. Below this, the details for the selected route table 'Example_pvt_rt' are shown, including its ID, subnet associations, and a list of routes.

Name	Route Table ID	Explicit subnet associations	Edge associations	Main	VPC ID	Owner
Example_pvt_rt	rtb-01a2e79e45c259516	subnet-00302dc8f3064d6dc	-	No	vpc-07340c7e97a5edc7	17768
	rtb-04b12b07228a1c8d2	-	-	Yes	vpc-07340c7e97a5edc7	17768
	rtb-0d5d340c81603798	-	-	Yes	vpc-024ce9686c1b44d3a	17768
custom_rt	rtb-0f6c90622af3f145	subnet-087748441c995e039	-	No	vpc-024ce9686c1b44d3a	17768
	rtb-3479164a	-	-	Yes	vpc-29be8753	17768

Destination	Target	Status	Propagated
192.168.0.0/16	local	active	No
0.0.0.0	igw-0df8890c06e4999f	active	No

On “Create Route Table” box

For name tag → Example_pvt_rt

For VPC → Example_VPC



Click on “Create button”

Route Tables > Create route table

Create route table

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

Name tag:

VPC:

Key (128 characters maximum):

Value (256 characters maximum):

This resource currently has no tags.

Add Tag 50 remaining (Up to 50 tags maximum)

* Required Cancel Create

Verify

Example_pvt_rt table is create

Filter by tags and attributes or search by keyword

Name	Route Table ID	Explicit subnet associations	Edge associations	Main	VPC ID	Owner
Example_pub_rt	rtb-01a2e79e45c259516	subnet-09392dc8f306496dc	-	No	vpc-07340d7e97a5edc7	17781
Example_pvt_rt	rtb-0368f115e918f0b	-	-	No	vpc-07340d7e97a5edc7	17781
	rtb-04b12b07228a1c8d2	-	-	Yes	vpc-07340d7e97a5edc7	17781
	rtb-0d56340d61603798	-	-	Yes	vpc-024ce9686c1b44d38	17781
custom_rt	rtb-0f6ec90822af3f145	subnet-087748441c995e036	-	No	vpc-024ce9686c1b44d38	17781
	rtb-3179f6fa	-	-	Yes	vpc-20ba8763	17781

Route Table: rtb-0368f115e918f0b

Summary Routes Subnet Associations Edge Associations Route Propagation Tags

Edit routes

View: All routes

Destination	Target	Status	Propagated
192.168.0.0/16	local	active	No



Click on Subnet Association button

The screenshot shows the AWS VPC console interface. On the left, there is a navigation menu with options like 'VPC Dashboard', 'Your VPCs', 'Subnets', 'Route Tables', 'Internet Gateways', etc. The main area displays a list of route tables. The 'Example_pvt_rt' is selected, and the 'Subnet Associations' tab is active. A red box highlights the 'Subnet Associations' tab. Below the tabs, there is a table with columns: Destination, Target, Status, and Propagated. The table shows a single entry for the destination 192.168.0.0/16 with a local target, active status, and no propagation.

Click on Edit button

The screenshot shows the AWS VPC console interface, similar to the previous one. The 'Example_pvt_rt' is selected, and the 'Subnet Associations' tab is active. A red box highlights the 'Edit subnet associations' button. Below the tabs, there is a table with columns: Subnet ID, IPv4 CIDR, and IPv6 CIDR. The table is empty, and a message states: 'You do not have any subnet associations. The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:'. The 'Edit subnet associations' button is highlighted with a red box.



Select Checkbox Example_pvt_sub → 192.168.20.0/24

Route Tables > Edit subnet associations

Edit subnet associations

Route table: rtb-0368f15e918f0b (Example_pvt_rt)

Associated subnets: subnet-0514b442838ab799f

Filter by attributes or search by keyword			
Subnet ID	IPv4 CIDR	IPv6 CIDR	Current Route Table
<input checked="" type="checkbox"/> subnet-0514b442838ab799f Example_pvt_sub	192.168.20.0/...	-	Main
<input type="checkbox"/> subnet-09392dd8f064d6dc Example_pub_subnet	192.168.10.0/...	-	rtb-01a2e79e45c259516

* Required

Cancel Save

VPC Dashboard

Filter by VPC: None

Virtual Private Cloud

Your VPCs

Subnets

Route Tables

Internet Gateways

Egress Only Internet Gateways

DHCP Options Sets

Elastic IPs

Endpoints

NAT Gateways

Create Route Table Delete Route Table Set As Main Table

Search Route Tables and their X

1 to 4 of 4 Route Tables

Name	Route Table ID	Explicitly Associat-	Main	VPC
hyd-pvt-route	rtb-ac446bca	0 Subnets	No	vpc-7d934d1b HYDVPC

rtb-ac446bca | hyd-pvt-route

Summary Routes Subnet Associations Route Propagation Tags

Cancel Save

Associate	Subnet	IPv4 CIDR	IPv6 CIDR	Current Route Table
<input type="checkbox"/>	subnet-b3dbefa hyd-pub-subnet	192.168.10.0/24	-	rtb-234b6445 hyd-pub-route
<input checked="" type="checkbox"/>	subnet-8abcb23 hyd-pvt-subnet	192.168.20.0/24	-	Main

Feedback English

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Click on Save button



Verify

Example_pvt_sub is associated with Example_pvt_rt table

Route Table: rb-038f115e918f0b

Subnet ID	IPv4 CIDR	IPv6 CIDR
subnet-0514b442838ab79...	192.168.20.0/24	-

Click on Route button

Route Table: rb-038f115e918f0b

Subnet ID	IPv4 CIDR	IPv6 CIDR
subnet-0514b442838ab79...	192.168.20.0/24	-

Note: No need to add IGW in private route

The screenshot shows the AWS VPC console interface. On the left, there's a sidebar with navigation options like 'VPC Dashboard', 'Subnets', 'Route Tables', 'Internet Gateways', etc. The main area displays a list of route tables. One route table, 'Example_priv_rt', is selected, showing its details. Below the list, the 'Routes' tab is active, showing a single route with destination '192.168.0.0/16', target 'local', status 'active', and 'Propagated' as 'No'. The 'Edit routes' button is visible.

The general pictorial representation of the VPC under the public and private subnet is shown below.

