

# VPC(Virtual Private Cloud)

SavitaNalawade

- From VPC we can create multiple networks
- AWS will create default vpc in every region while creating account
- Default vpc will create as per (no of subnet=no of availability zone)
- By default vpc will provide(subnet,route-table,security group,Internet gateway,NACL(Network Access Control List))
- In VPC we are using CIDR(Classless Inter Domain Routing ) to IP configuration

❖ Create 1 custom VPC and create three subnet

1.Provide vpc name and ip

The screenshot displays the AWS Management Console interface for creating a new VPC. The top navigation bar includes the AWS logo, 'Services', a search bar, and a keyboard shortcut '[Alt+S]'. The main heading is 'Create VPC' with an 'Info' link. Below this, a descriptive text states: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.'

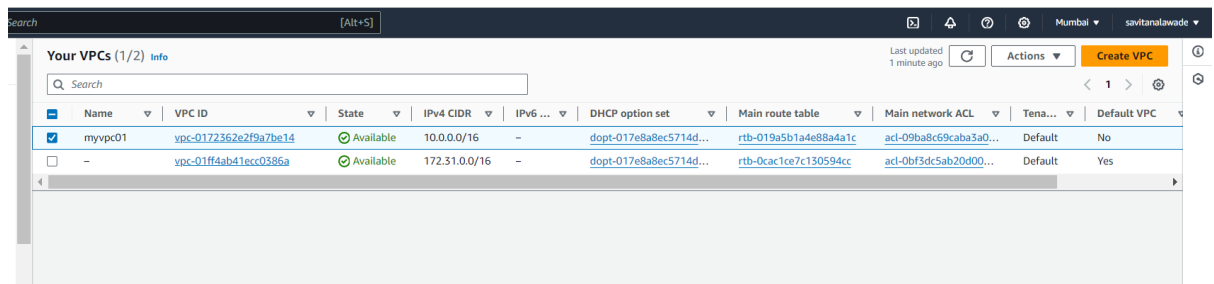
The 'VPC settings' section contains the following configuration options:

- Resources to create:** Two radio buttons are present. 'VPC only' is selected, while 'VPC and more' is unselected.
- Name tag - optional:** A text input field contains the value 'myvpc01'. A note below states: 'Creates a tag with a key of 'Name' and a value that you specify.'
- IPv4 CIDR block:** Two radio buttons are present. 'IPv4 CIDR manual input' is selected, while 'IPAM-allocated IPv4 CIDR block' is unselected.
- IPv4 CIDR:** A text input field contains the value '10.0.0.0/16'. A note below states: 'CIDR block size must be between /16 and /28.'
- IPv6 CIDR block:** Four radio buttons are present. 'No IPv6 CIDR block' is selected, while 'IPAM-allocated IPv6 CIDR block', 'Amazon-provided IPv6 CIDR block', and 'IPv6 CIDR owned by me' are unselected.
- Tenancy:** A dropdown menu is set to 'Default'.

At the bottom of the 'VPC settings' section, there is a 'Tags' section with a descriptive text: '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.'

The footer of the console shows 'CloudShell' and 'Feedback' links.

## 2.VPC have been created



Search [Alt+S]

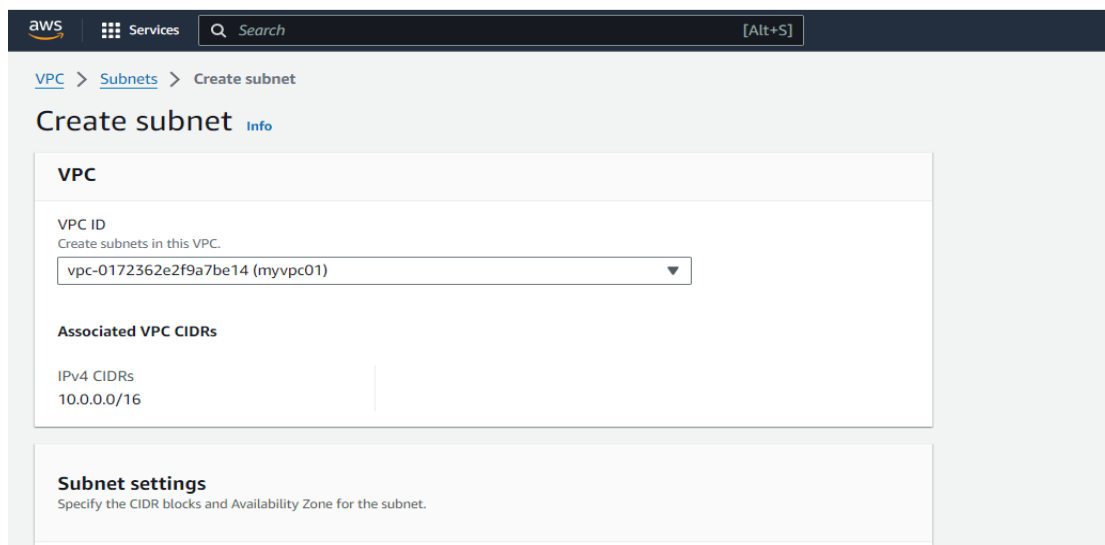
Your VPCs (1/2) Info

Last updated 1 minute ago

Actions Create VPC

	Name	VPC ID	State	IPv4 CIDR	IPv6 ...	DHCP option set	Main route table	Main network ACL	Tena...	Default VPC
<input checked="" type="checkbox"/>	myvpc01	vpc-0172362e2f9a7be14	Available	10.0.0.0/16	-	dopt-017e8a8ec5714d...	rtb-019a5b1a4e88a4a1c	acl-09ba8c69caba3a0...	Default	No
<input type="checkbox"/>	-	vpc-01ff4ab41ecc0386a	Available	172.31.0.0/16	-	dopt-017e8a8ec5714d...	rtb-0cac1ce7c130594cc	acl-0bf3dc5ab20d00...	Default	Yes

## 3.Create subnet: select your vpc which is created



aws Services Search [Alt+S]

VPC > Subnets > Create subnet

### Create subnet Info

**VPC**

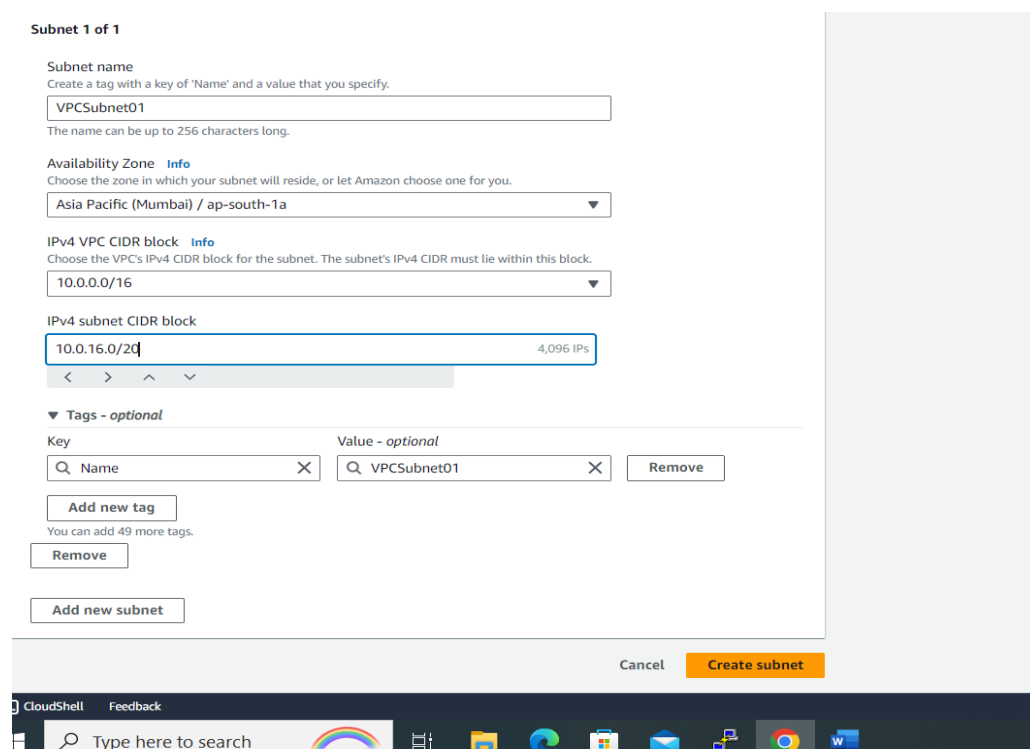
VPC ID  
Create subnets in this VPC.  
vpc-0172362e2f9a7be14 (myvpc01)

**Associated VPC CIDRs**

IPv4 CIDRs  
10.0.0.0/16

**Subnet settings**  
Specify the CIDR blocks and Availability Zone for the subnet.

## 4.while creating subnet provide subnet-name, Availability zone & subnet CIDR



Subnet 1 of 1

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
VPCSubnet01  
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.  
Asia Pacific (Mumbai) / ap-south-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.  
10.0.0.0/16

**IPv4 subnet CIDR block**  
10.0.16.0/20 4,096 IPs

**Tags - optional**

Key	Value - optional	
Q Name	Q VPCSubnet01	Remove

Add new tag  
You can add 49 more tags.

Remove

Add new subnet

Cancel Create subnet

CloudShell Feedback

Type here to search

## 5. Create one more subnet in “b” zone

**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.

**IPv4 subnet CIDR block**  
 4,096 IPs  

< > ^ v

**Tags - optional**

**Key**

**Value - optional**

You can add 49 more tags.

## 6. Create one more subnet in “c” zone

**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.

**IPv4 subnet CIDR block**  
 256 IPs  

< > ^ v

**Tags - optional**

**Key**

**Value - optional**

You can add 49 more tags.

7. Subnets are created successfully.

Subnets (6) Info

Last updated 4 minutes ago

Actions

Create subnet

Find resources by attribute or tag

	Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 ...	IPv6 ...	Availa...	Availability Zone
<input type="checkbox"/>	VPCSubnet02	subnet-06f0f307352440308	Available	ypc-0172362e2f9a7be14   myv...	10.0.32.0/20	-	-	4091	ap-south-1b
<input type="checkbox"/>	VPCSubnet03	subnet-0f4197c06028cb950	Available	ypc-0172362e2f9a7be14   myv...	10.0.1.0/24	-	-	251	ap-south-1c
<input type="checkbox"/>	VPCSubnet01	subnet-01229a65d7097d770	Available	ypc-0172362e2f9a7be14   myv...	10.0.16.0/20	-	-	4091	ap-south-1a
<input type="checkbox"/>	-	subnet-0697f7f6159fd5ff	Available	ypc-01ff4ab41ecc0386a	172.31.0.0/20	-	-	4091	ap-south-1b
<input type="checkbox"/>	-	subnet-0117669ed04a81901	Available	ypc-01ff4ab41ecc0386a	172.31.32.0/20	-	-	4091	ap-south-1a
<input type="checkbox"/>	-	subnet-0f00995f926719d14	Available	ypc-01ff4ab41ecc0386a	172.31.16.0/20	-	-	4091	ap-south-1c

Thank you !