



Build a Virtual Private Cloud (VPC)



Coran Chunilall

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.
Network VPC

IPv4 CIDR block Info
 IPv4 CIDR manual input IPAM-allocated IPv4 CIDR block
10.0.0.0/16

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

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



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Introducing Today's Project!

What is Amazon VPC?

Amazon VPC (Virtual Private Cloud) is a logically isolated virtual network within AWS where you can launch and manage cloud resources in a secure, controlled environment.

How I used Amazon VPC in this project

I used a VPC to setup a subnet

One thing I didn't expect in this project was...

I did not expect to use an internet gateway

This project took me...

1 hour

A circular profile picture of a young man with short hair, wearing a dark t-shirt, standing outdoors with a building and trees in the background.

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Virtual Private Clouds (VPCs)

VPCs are a logically isolated section of cloud infrastructure where you can launch and manage computing resources in a virtual network that you define and control

There was already a default VPC in my account ever since my AWS account was created. This is because you can launch EC2 instances and connect other services because if it didn't exist the first thing you would learn is to create a VPC

To set up my VPC, I had to define an IPv4 CIDR block, which is a method for defining and allocating IP address ranges using a compact notation that combines an IP address with a subnet mask.



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Subnets

Subnets are smaller, logical divisions within a VPC that segment your network into manageable pieces, each with its own range of IP addresses. There are already subnets existing in my account, one for every AZs

Once I created my subnet, I enabled auto-assign public IPv4 addresses. This setting makes sure any EC2 instance launched in that subnet will instantly get a public IP address so you wont have to create one manually

Public subnets have a direct route to an Internet Gateway in their route table, allowing resources to communicate bidirectionally with the internet. Private subnets have no route to an Internet Gateway, preventing direct internet access for security.



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Subnets (1/1) Info						
<input type="text"/> Find subnets by attribute or tag						
Actions Create subnet						
Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR	IPv6 CIDR
<input checked="" type="checkbox"/> Public 1	subnet-02b27256be4235dfc	Available	vpc-08ced695d9386e1a3	Off	10.0.0.0/24	-



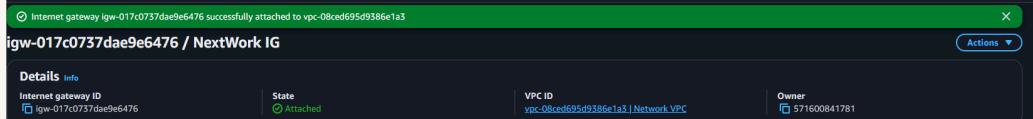
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Internet gateways

Internet gateways are key to making applications available on the internet. By attaching an internet gateway, your instances can access the internet and accessible to external users

Attaching an internet gateway to a VPC can now access the internet. If i missed this step my VPC would not connect to the internet and not allow external users





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