



# Build a Virtual Private Cloud



phogan2886@gmail.com

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.

NextWork VPC

IPv4 CIDR block [Info](#)  
 IPv4 CIDR manual input  IPAM-allocated IPv4 CIDR block

IPv4 CIDR  
10.0.0.0/16

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 - <i>optional</i>

# Introducing Today's Project!

## What is Amazon VPC?

Amazon Virtual Private Cloud (VPC) is a service that allows users to launch Amazon Web Services (AWS) resources in a virtual network that they define.

## How I used Amazon VPC in this project

I created a public subnet and attached an Internet Gateway so that the resources can utilize the outside network

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

The ease I was able to create a subnet and have it auto assign IP Addresses. This make it so when I launch a bucket or instance, I do not have to worry about assignments.

## This project took me...

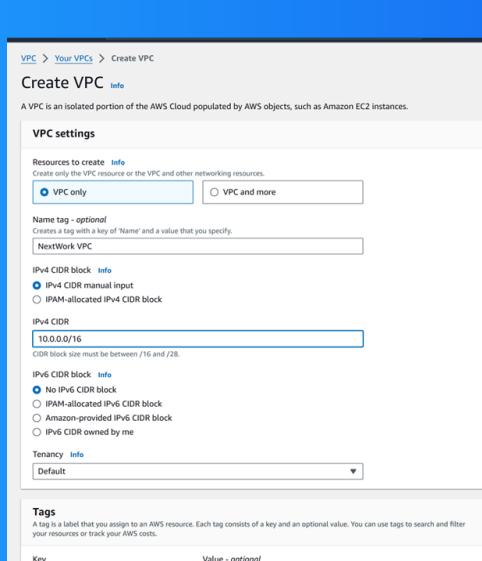
Took me less than 30 minutes to complete

# Virtual Private Clouds (VPCs)

A VPC is a virtual network that closely resembles a traditional network that you'd operate in your own data center. After you create a VPC, you can add subnets. you can launch AWS resources in a logically isolated virtual network that you've defined.

There was already a default VPC in my account ever since my AWS account was created. This is because it helps you quickly get started! This default VPC allows you to launch resources and test AWS services without needing to set up a VPC from scratch.

To set up my VPC, I had to define an IPv4 CIDR, which means it is a way to assign a whole block of IP addresses, kind of like creating a zone/area in a city

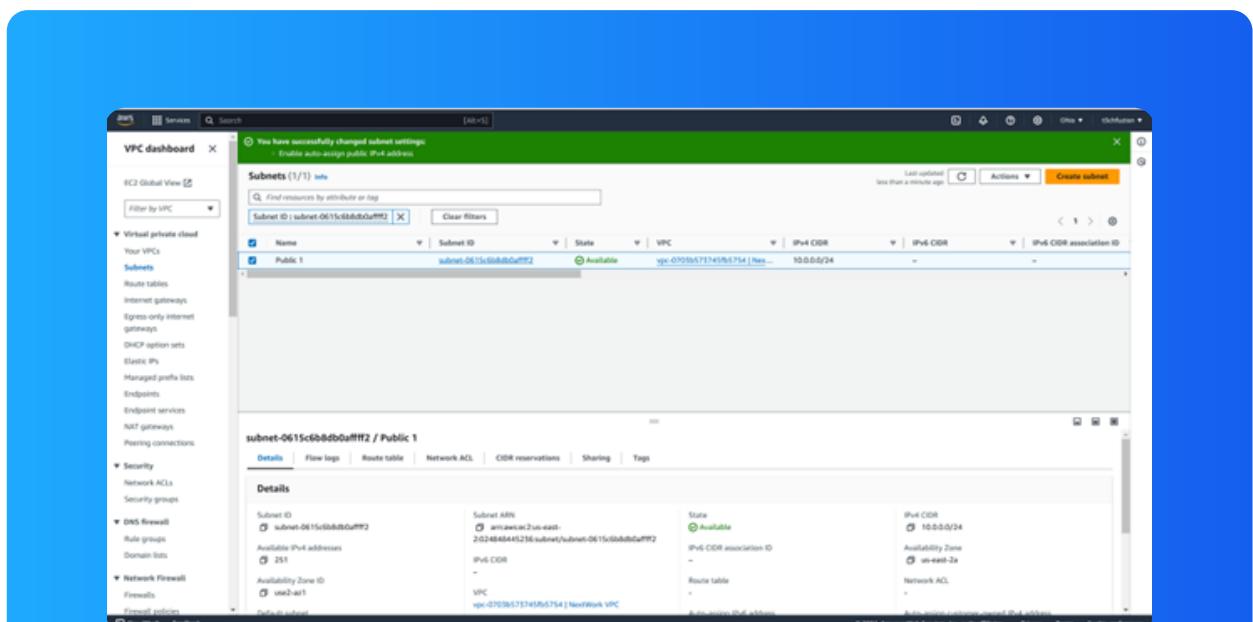


# Subnets

Subnets are a range of IP addresses that can be connected to the internet, other VPCs, and data centers. Subnets can be public or private, and they can be configured as VPN-only subnets.

The default VPC provided by AWS comes with predefined subnets in each Availability Zone of a Region, which means you'll see 3 subnets on your page if your Region has 3 Availability Zones. These default subnets are ready to use.

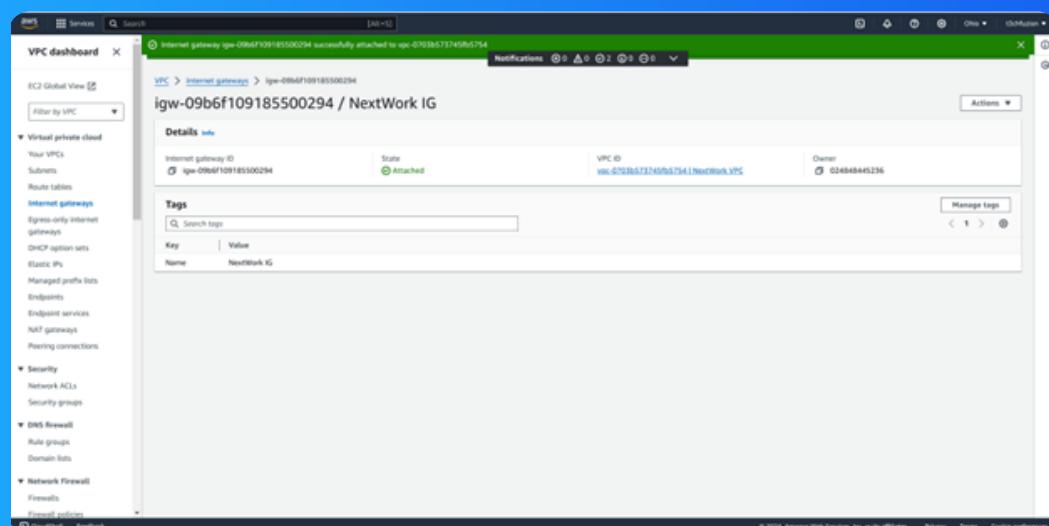
I named my subnet Public 1, but that doesn't automatically make my subnet a public subnet. For a subnet to be considered public, it has to have a route to an internet gateway



# Internet gateways

Internet gateways are like the main entrance gate to your city. It allows visitors (data from the internet) to enter and exit, facilitating communication between the inside of your city (VPC) and the outside world (internet).

Attaching an internet gateway to a VPC means resources in your VPC can now access the internet. The EC2 instances with public IP addresses also become accessible to users, so your applications hosted on those servers become public too.





NextWork.org

# **Everyone should be in a job they love.**

Check out nextwork.org for  
more projects

