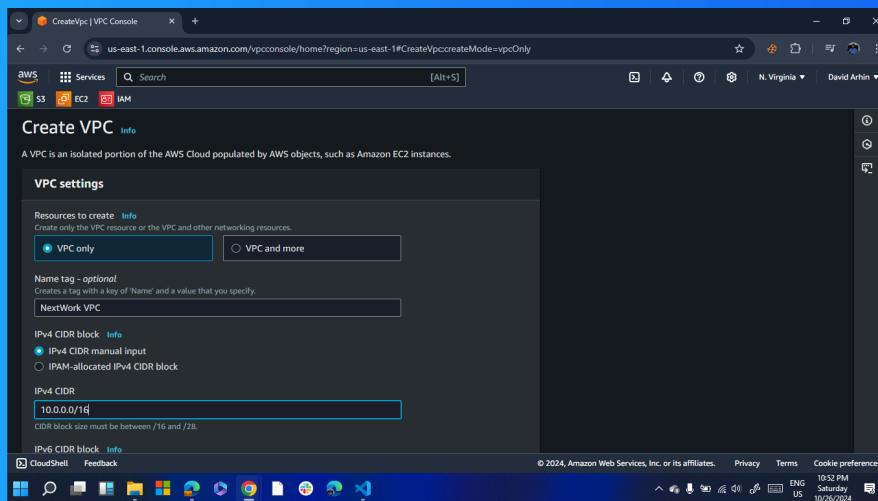




# Build a Virtual Private Cloud



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# Introducing Today's Project!

## What is Amazon VPC?

Amazon VPC is a service that allows users to create isolated virtual networks in AWS, providing control over networking configurations and enhancing security for cloud-hosted applications.

## How I used Amazon VPC in this project

I utilized Amazon VPC to establish a network environment, configuring subnets and an internet gateway to manage traffic for my applications.

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

I didn't expect to configure auto-assigned IP addresses for the subnet because I thought the default settings would be sufficient for internet communication.

## This project took me...

35 minutes



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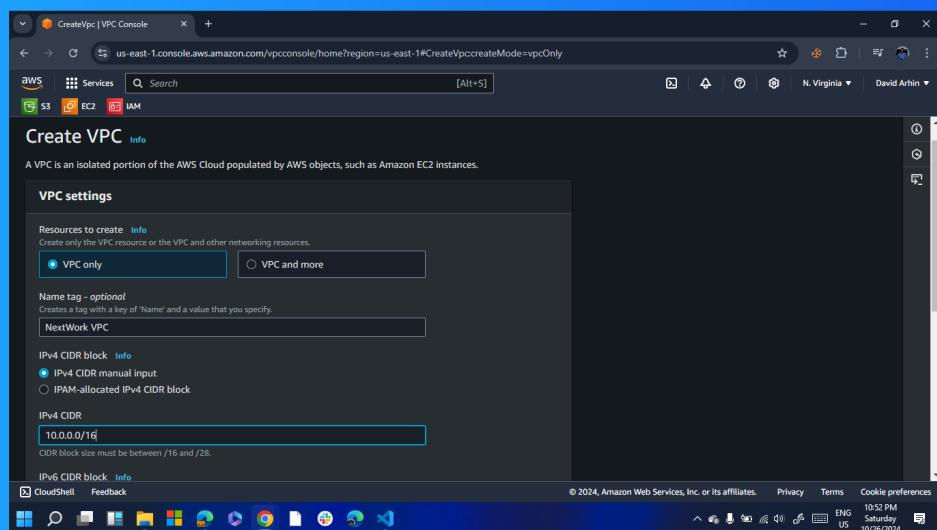
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# Virtual Private Clouds (VPCs)

A Virtual Private Cloud (VPC) is an isolated, virtual network dedicated to your AWS account that enables you to define and control a network environment for hosting and securing resources.

There was already a default VPC in my account ever since my AWS account was created. This is because AWS automatically creates a default VPC in each region to make it easier for new users to launch, test resources without needing to configure them

To set up my VPC, I had to define an IPv4 CIDR, which means specifying a range of IP addresses in the format of a Classless Inter-Domain Routing (CIDR) block, allowing you to define the scope of IP addresses available in the VPC





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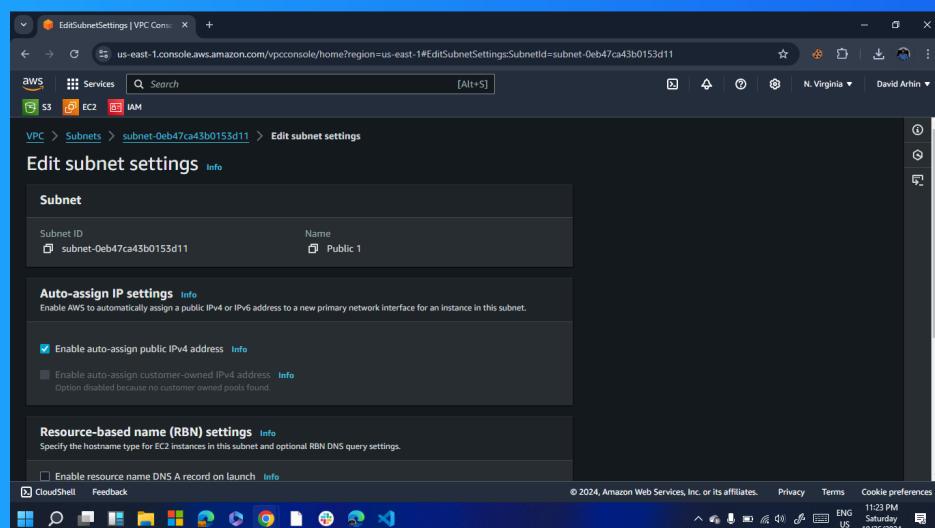
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# Subnets

Subnets are subdivisions within a VPC that help organize and isolate resources by allocating specific IP ranges within the VPC's CIDR block.

There are default subnets in my AWS account, one per Availability Zone, to enable easy deployment with built-in internet connectivity and high availability.

I named my subnet Public 1, but it's not public until it's linked to a route table with an internet gateway and has public IPs for its instances.

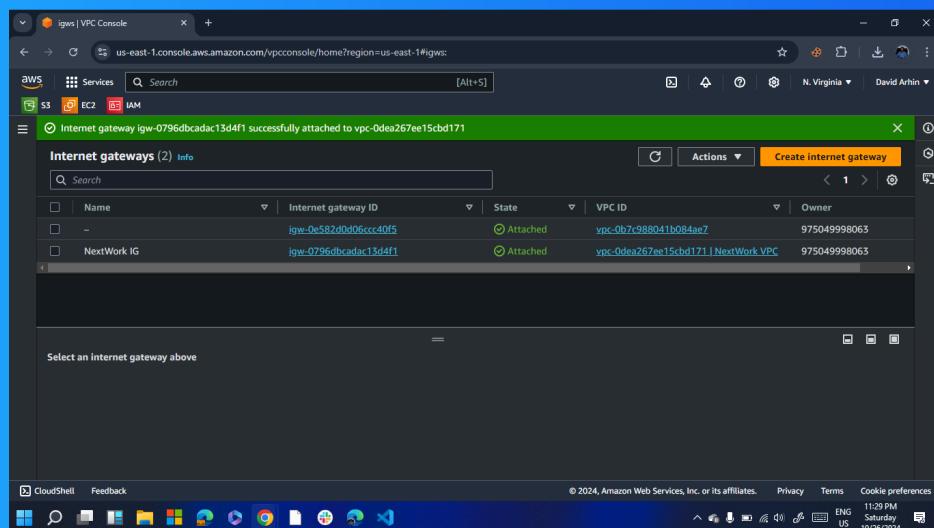




# Internet gateways

Internet gateways are components that enable communication between VPC resources and the internet, allowing instances in public subnets to access and receive traffic from the internet.

Attaching an internet gateway to a VPC allows resources within the VPC to communicate with the internet, enabling internet access for instances in public subnets.





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