



Launching VPC Resources



Sayed Mahmeer Ali Shah

The screenshot shows the 'Create VPC' wizard in the AWS VPC console. On the left, the 'VPC settings' section includes fields for 'Name tag auto-generation' (set to 'Auto-generate'), 'CIDR block' (set to '0.0.0.0/16'), and 'IPv6 CIDR block' (set to 'No IPv6 CIDR block'). On the right, the 'Preview' section shows a summary of the proposed VPC configuration:

- VPC:** project-vpc (Your AWS virtual network)
- Subnets (4):**
 - ap-southeast-1a
 - project-subnet-public1-ap-proj
 - project-subnet-private1-ap-proj
 - ap-southeast-1b
 - project-subnet-public2-ap-proj
 - project-subnet-private2-ap-proj
- Routes:** (Listed under the preview panel)



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Introducing Today's Project!

What is Amazon VPC?

Amazon Virtual Private Cloud (VPC) is a foundational service in Amazon Web Services (AWS) that allows you to create a logically isolated virtual network within the AWS cloud. It is useful because it provides Enhanced Security and Isolation.

How I used Amazon VPC in this project

I used VPC and more option thus time to create VPC easily and more interestingly while seeing the resources map with it. I was given many options to create subnets, gateways, security groups etc. in an interesting way.

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

I did not expect to explore the other option which is VPC and more to be that precise and easy with amazing visuals.

This project took me...

This project was quite more interesting and took almost 30 minutes to complete.

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Setting Up Direct VM Access

Directly accessing a virtual machine means establishing a connection directly to the operating system on a virtual machine.

SSH is a key method for directly accessing a VM

SSH establishes a secure, encrypted connection between client and server over an insecure network.

To enable direct access, I set up key pairs

A key pair is a type of algorithm to encrypt and generate the login keys.

A private key's file format means the type of algorithm used for encryption. My private key's file format was .pem.

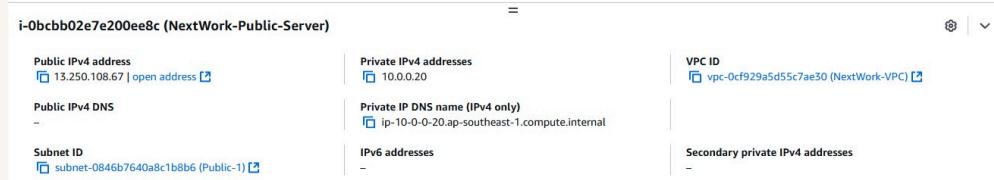
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Launching a public server

I had to change my EC2 instance's networking settings by checking the checkbox under the instance, click to Action and go to networking section.



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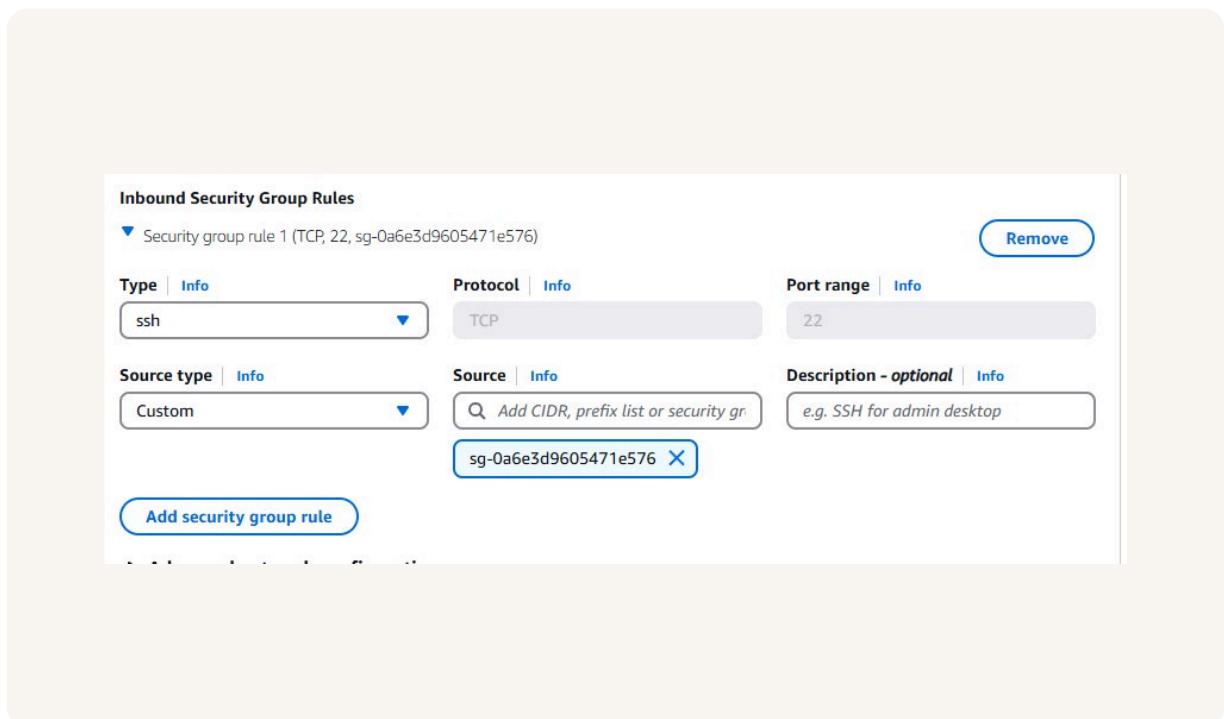
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Launching a private server

My private server has its own dedicated security group because it is one of the best practices to secure our server which contains our resources, data, website, etc. in order to block public access.

My private server's security group's source is my public security group which means i have connected both and secured my server.



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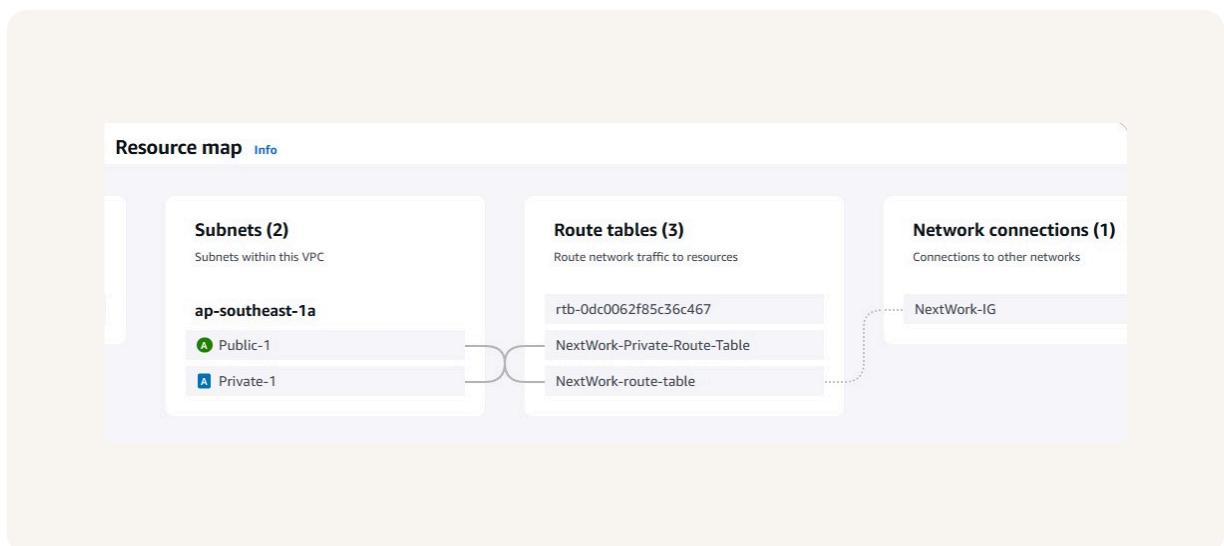
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Speeding up VPC creation

I used an alternative way to set up an Amazon VPC! This time, I tried VPC and more and found it more clarifying, easier, and interesting. I found it more understandable because of the resources map's visibility. Simply wow

A VPC resource map is your VPC's network diagram that makes everything visible. It's like a roadmap to a destination.

My new VPC has a CIDR block of because the new one is made like a template from the last one. It is possible for my new VPC to have the same IPv4 CIDR block as my existing VPC because they are both entirely different VPCs, not connected directly.



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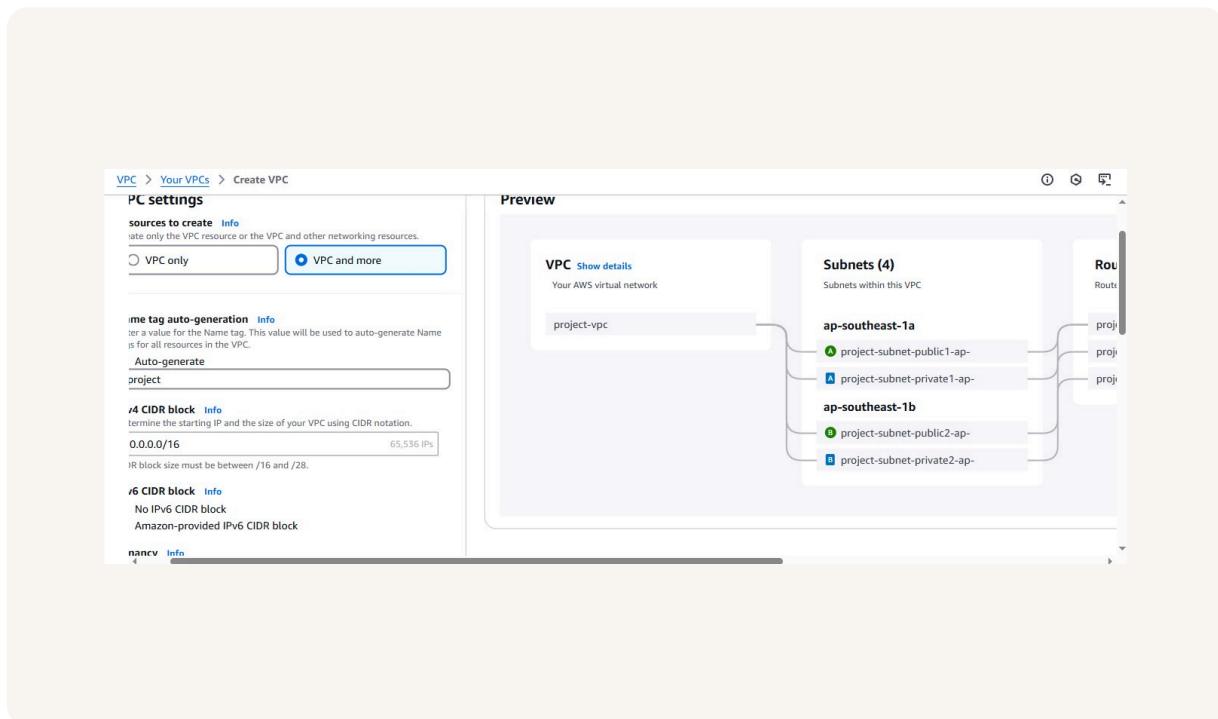
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Speeding up VPC creation

Tips for using the VPC resource map

When determining the number of public subnets in my VPC, I only had two options: 0 and 2. This was because I could create 4 private subnets.

The setup page also offered to create NAT gateways, which are Network Address Translations that allow instances in a private subnet of a virtual network to connect to the internet.





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