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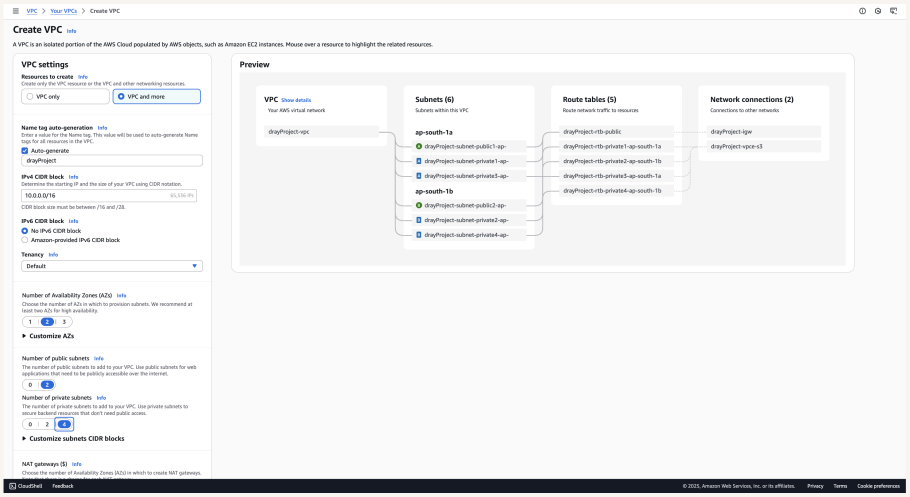
Launching VPC Resources

Gaurav Balpande



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Introducing Today's Project!

What is Amazon VPC?

Amazon VPC is the fundamental networking tool which is used for creation of private space within the AWS region. It is needed for security and to easily manage the resources.

How I used Amazon VPC in this project

in today's project i had creted EC2 instance in public and private and also learn about Amazon VPC wizard.

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

I never expect that it would take just a minute to build the entire networking part with used of Amazon VPC wizard.

This project took me...

it took near to 1.30 hr

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Setting Up Direct VM Access

Directly accessing a virtual machine means we don't need to provide any key and by just AWS connection we can connect securely.

SSH is a key method for directly accessing a VM

SSH traffic means the Secured Shell protocol traffic which is mostly used for making remote connection.

To enable direct access, I set up key pairs

Key pairs are for security purpose which are used by providing one part of the key i.e. private key and kepping the secong part i.e. public key. The two keys are then matched for security check.

A private key's file format means the format in which key is stored My private key's file format was .pem

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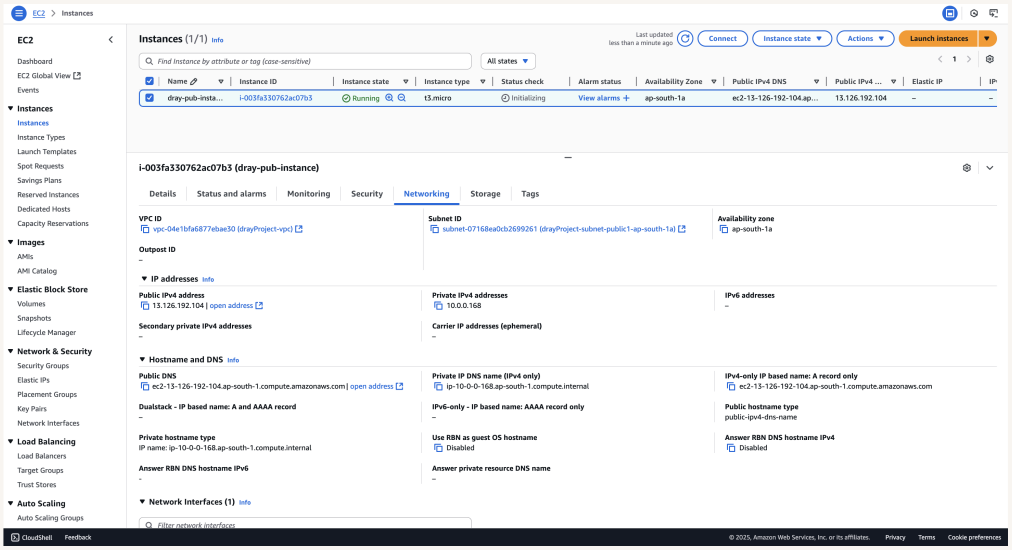
Launching a public server

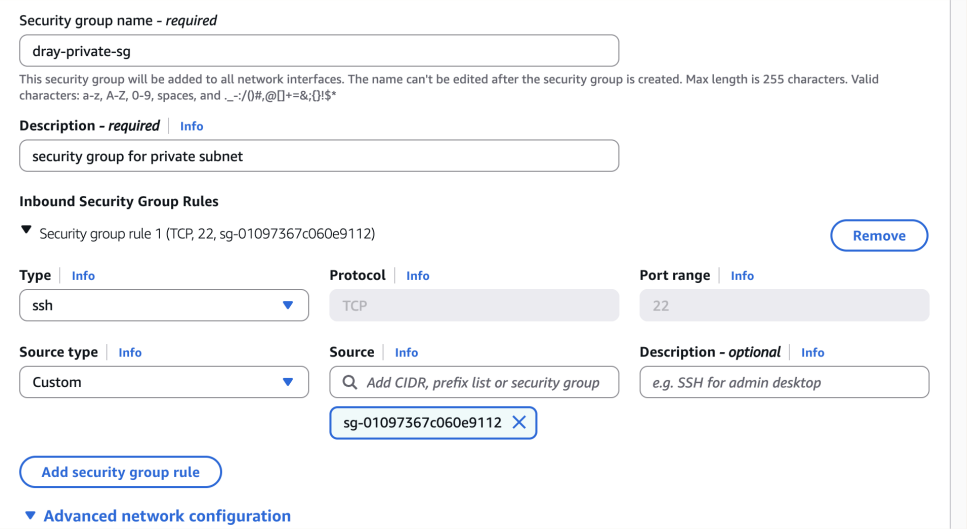
I had to change my EC2 instance's networking settings by updating the VPC to public VPC and public subnet. Also the the security group is allowing all traffic.



Launching a private server

My private server has its own dedicated security group because it should not be directly connected to internet and there should be just a private ssh connection.

My private server's security group's source is ssh from the security group of public subnet which means only the resources in thr public subnet can create a ssh connection providing security.



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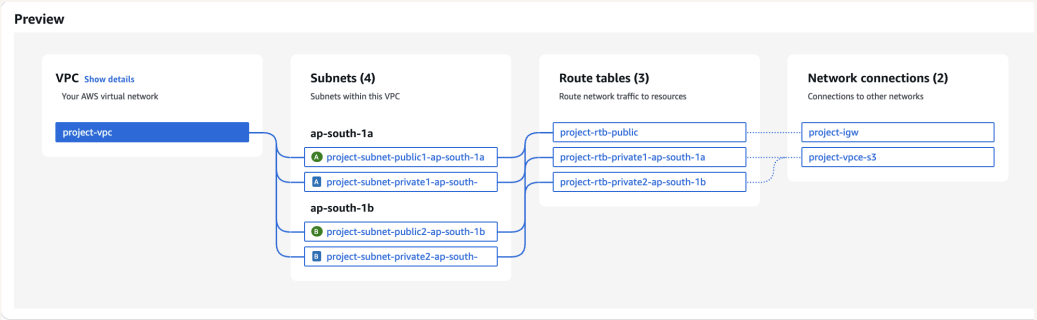
Speeding up VPC creation

I used an alternative way to set up an Amazon VPC! This time, I used Amazon VPC Wizard to create the networking tools.

A VPC resource map is the architecture diagram which shows all the networking tools and their connection.

My new VPC has a CIDR block of 10.0.0.0/16 It is possible for my new VPC to have the same IPv4 CIDR block as my existing VPC because they are different private space and they can have separate ips but peering is not possible.



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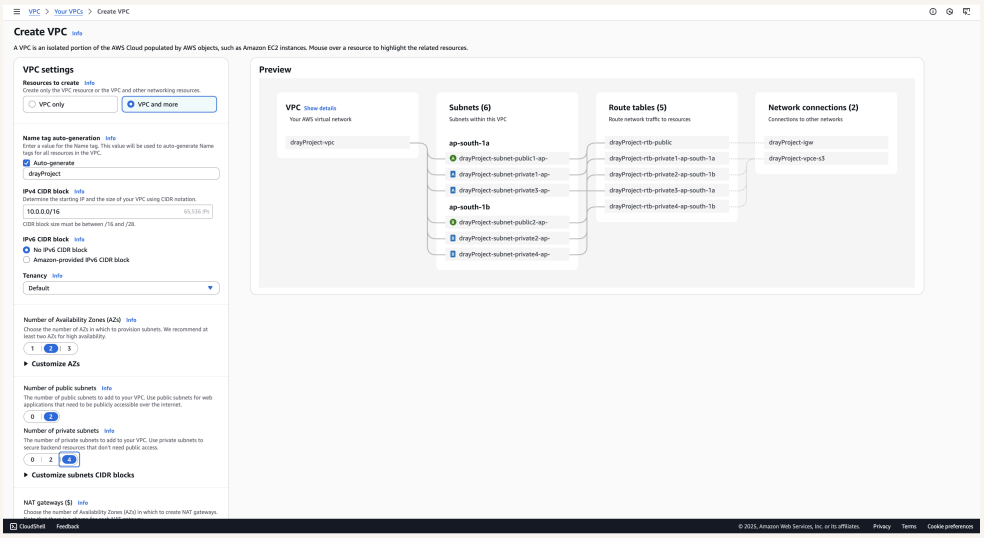
Speeding up VPC creation

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 had set the number of Availability sone to 2 and now if i create a publis subnet it should be same as number of avaiabilty zone or zero.

The set up page also offered to create NAT gateways, which are used for creating secured connection to outside resources for the private subnet.



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