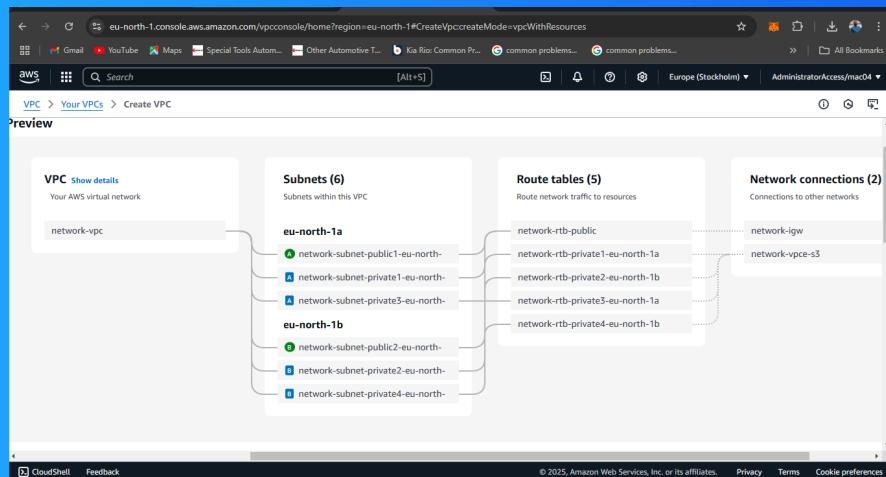




Launching VPC Resources



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Introducing Today's Project!

What is Amazon VPC?

Amazon VPC is a private section of Amazon cloud. This isolation fosters security, ensuring that the public do not get access to resources or data within unless permitted.

How I used Amazon VPC in this project

In today's project, I launched EC2 instances on my VPC. Creating a pathway for public access and a subnet for securing credentials.

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

I didn't expect it to take this much time.

This project took me...

60 mins.



Setting Up Direct VM Access

Directly accessing a virtual machine means logging into and managing the operating system or software of the machine as if you were using it in front of you but over the internet. Majorly for operations that require direct OS level access.

SSH is a key method for directly accessing a VM

SSH traffic means Secure Shell traffic and it's a protocol used to secure access to remote machines.

To enable direct access, I set up key pairs

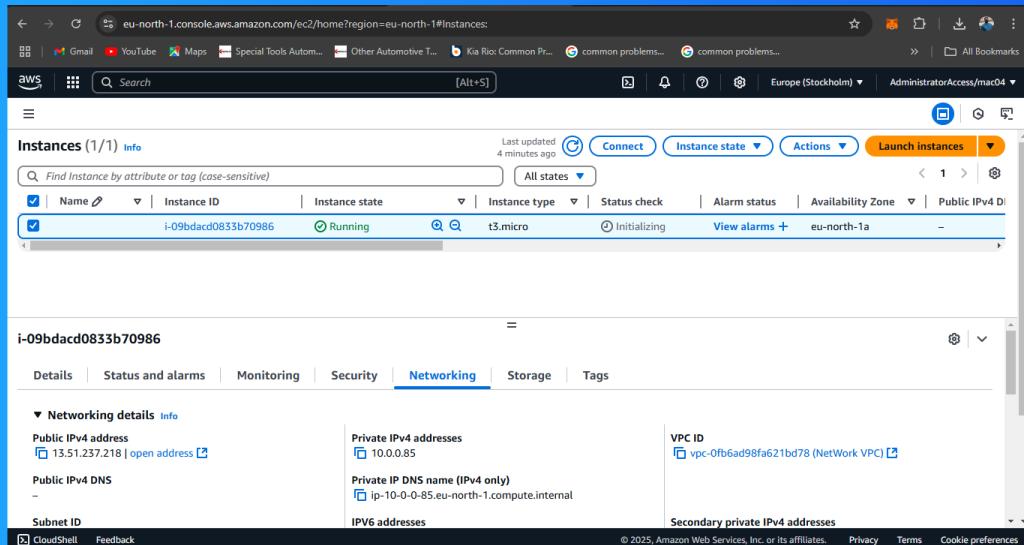
Key pairs are a set of cryptographic keys; a private and public key, that allows engineers to gain direct access to EC2 instances.

A private key's file format means the type of key format that the instance can work with. My private key's file format was ".pem".



Launching a public server

I had to change my EC2 instance's networking settings by first changing the default VPC to the VPC I created and then changing the subnet from the default subnet to the public subnet I created.





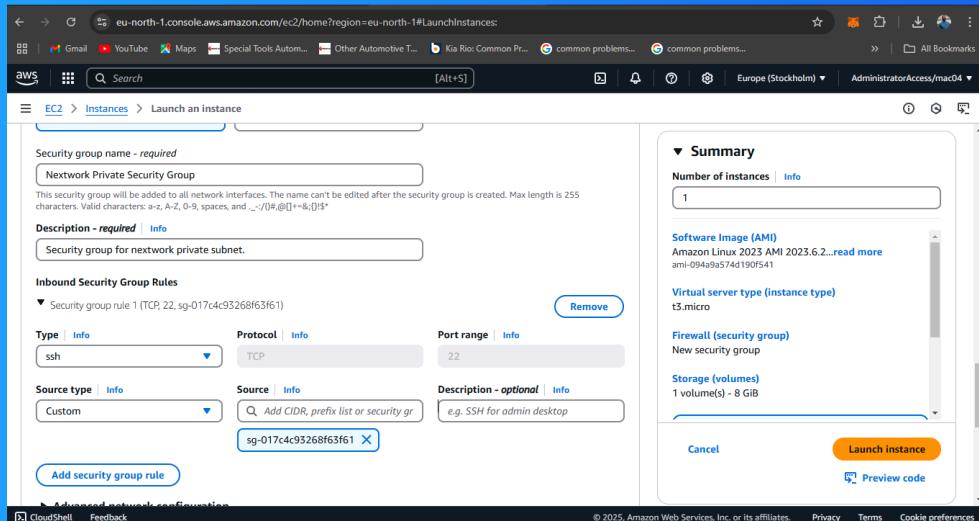
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Launching a private server

My private server has its own dedicated security group because the security group of the public server allows all traffic and I don't want that on my private server.

My private server's security group's source is the security group of my public server which means that only resources that are associated with my public server can communicate with my private server.





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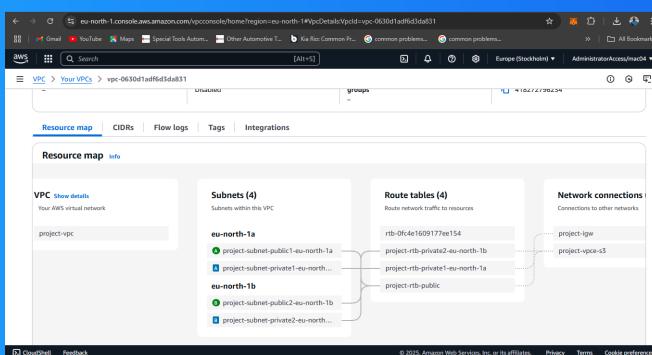
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Speeding up VPC creation

I used an alternative way to set up Amazon VPC! This time, I clicked on VPC and more in the create VPC page, set AZ to 1, set private subnet to 1, set my public and private CIDR blocks to 10.0.0.0/24 and 10.0.1.0/24 respectively and also enabled DNS.

A VPC resource map is a flowchart to understand the architectural layout of a VPC.

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 VPCs are isolated by default and as such cannot overlap unless peered.





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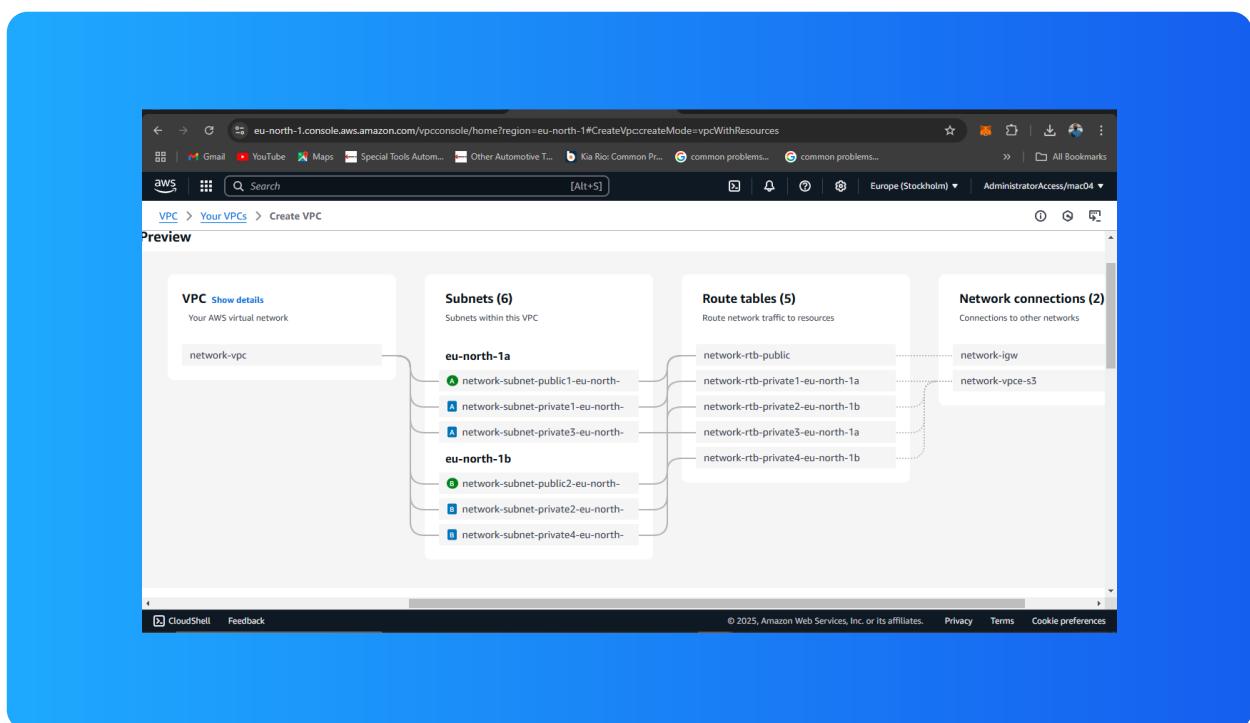
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Speeding up VPC creation

Tips for using the VPC resource map

When determining the number of public subnets in my VPC, I only had two options; 0 or 2. This was because AWS limits the number of public subnets that can be created to reduce public exposure.

The set up page also offered to create NAT gateways, which are pathways that let private subnets access the internet for updates and patches, while blocking inbound traffic.





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