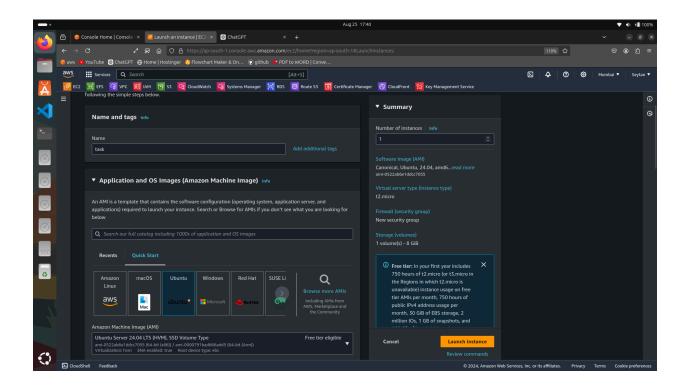
Task: Creation of EC2 Instance and Connecting Over SSH.

Step 1: Launch a New EC2 Instance.

What is EC2 instance?

→An EC2 instance is a virtual server in Amazon's Elastic Compute Cloud (EC2) that runs an operating system (OS) of your choice. It provides scalable computing power, allowing you to deploy and manage applications in the cloud as if you were using a physical machine.



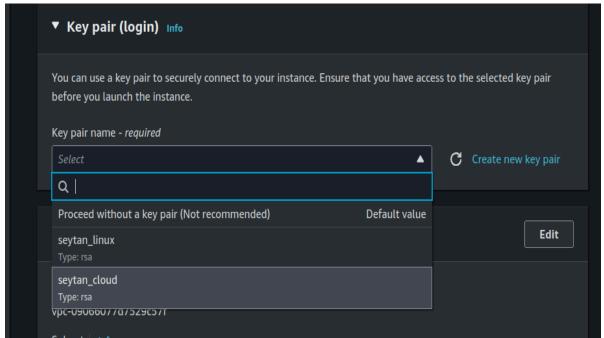
Step 2: Create new key-pair or may use existing key-pair for connection and also select a Existing Security Group or create a new one.

What is Key-pair and Security Group?

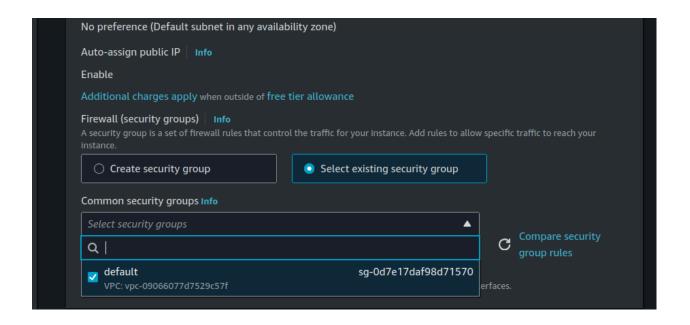
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A key pair in AWS consists of a public key and a private key used to securely connect to an EC2 instance. The public key is stored by AWS, while the private key is kept by the user. The private key is required to establish an SSH connection to the instance, ensuring secure access.

A security group acts as a virtual firewall for your EC2 instance, controlling inbound and outbound traffic. You can define rules that specify which IP addresses, protocols, and ports are allowed to access your instance, providing an additional layer of security.



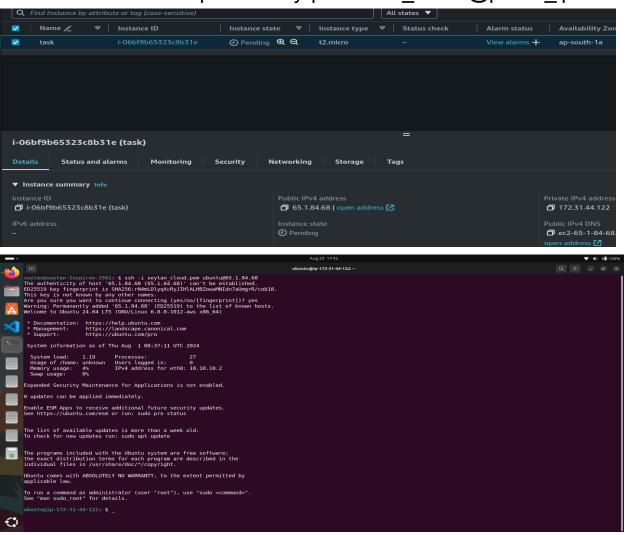
Add 22 port in sg for using the ssh.



Step 3: Now after creating ec2 instance we have to get the connection of it.

Note: the private_key_pair file should not have execution permission so make it Chmod 600 private_key_pair.pem.

Copy the public ip of the instance and then use the command →ssh -i private-key-pair user_name@public_ip



<u>Conclusion:</u>Successfully creating and securely connecting to an EC2 instance via SSH enables you to deploy and manage applications in the AWS cloud. This foundational task is essential for effective cloud infrastructure management.