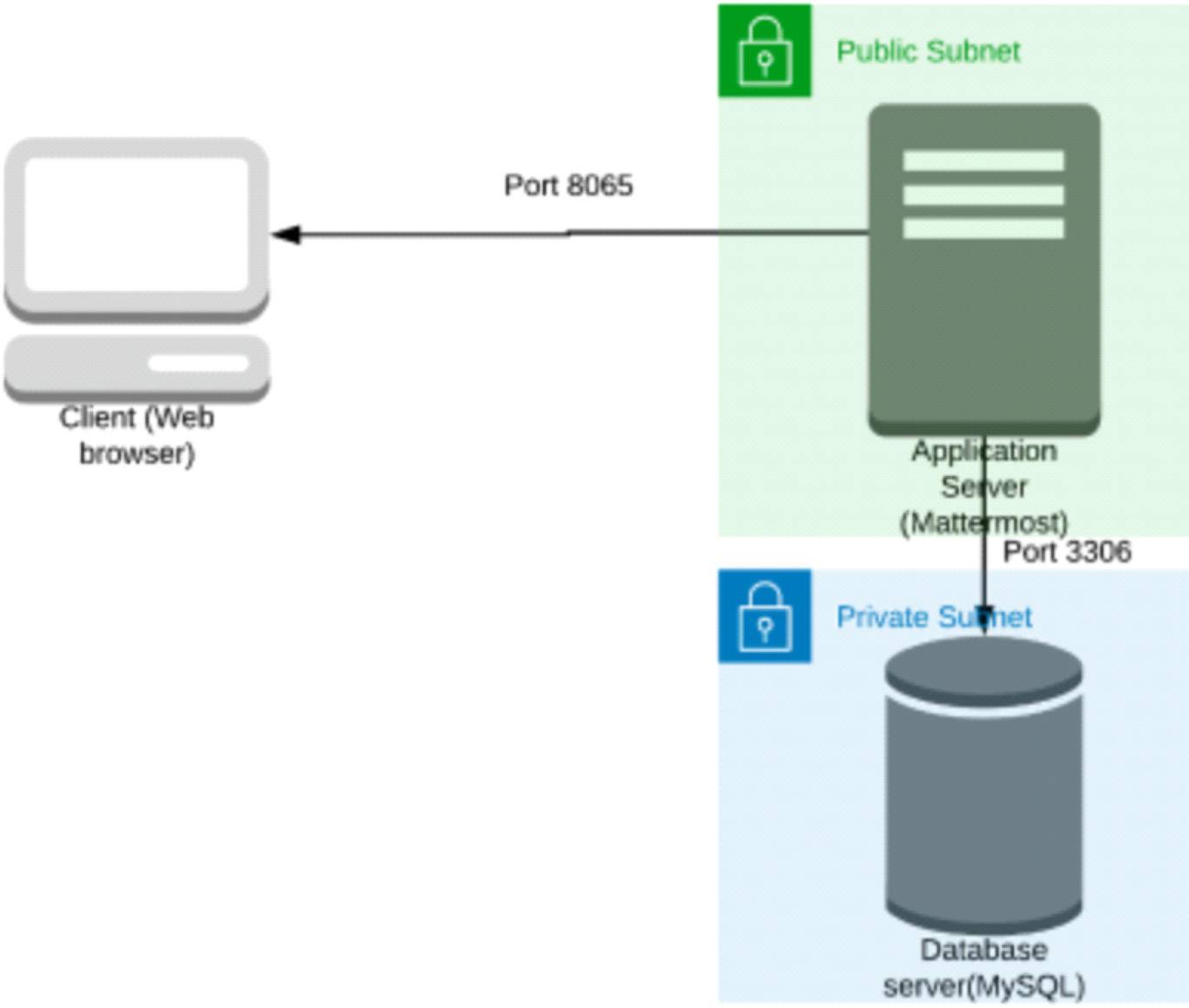
Some organizations might have compliance policies in place which do not allow them to use services managed by third parties. They will prefer solutions that can be managed and hosted on servers controlled by them. The same will extend to communication solutions as well.

Architecture diagram

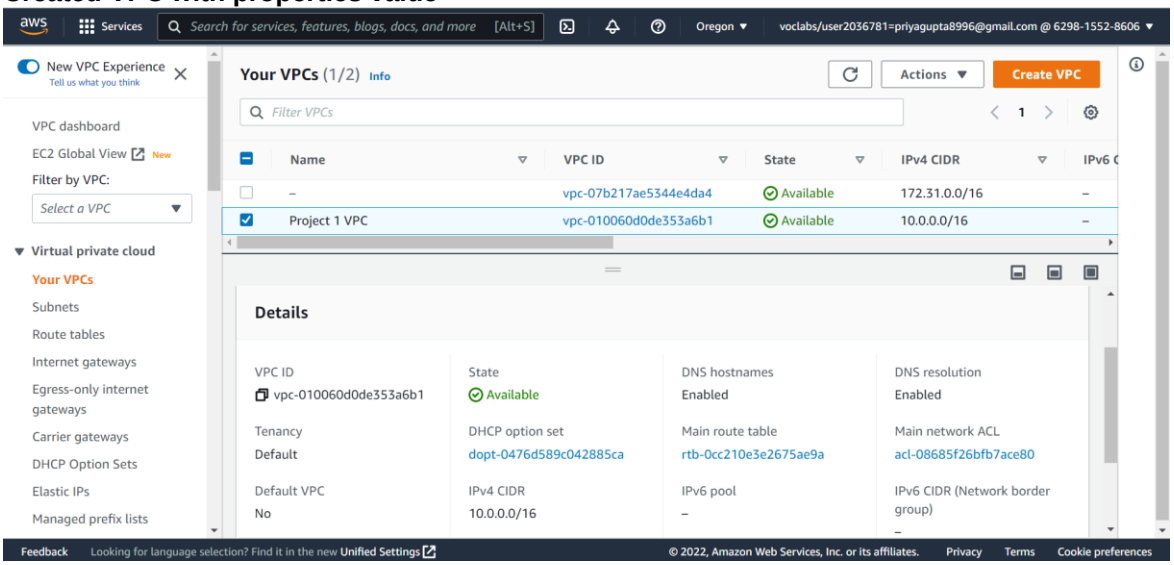


Architecture Implementation	
1	Implement 2 different subnets (one public and the other private) in a custom VPC
2	Install and configure MySQL on an Amazon Linux 2 instance on the private subnet using the instructions provided. (Hint: Use a bastion host and a NAT gateway)
3	Install and configure Mattermost on an Amazon Linux 2 instance on the public subnet using the provided instructions.
4	Configure the security groups to allow the ports as shown in the architecture.
5	Test the installation by accessing the IP of the public instance in a browser via the port 8065.

Step 1: VPC and Subnet Creation

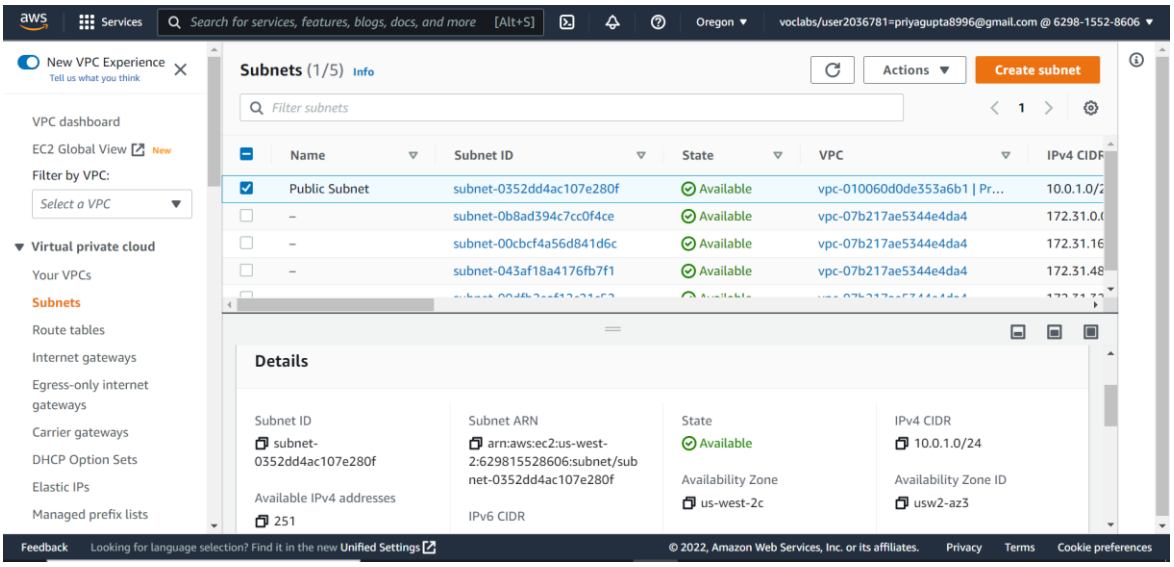
Step number	a		
Step name	Creation of VPC		
Expected screenshots	• Created VPC with properties visible		

Created VPC with properties value



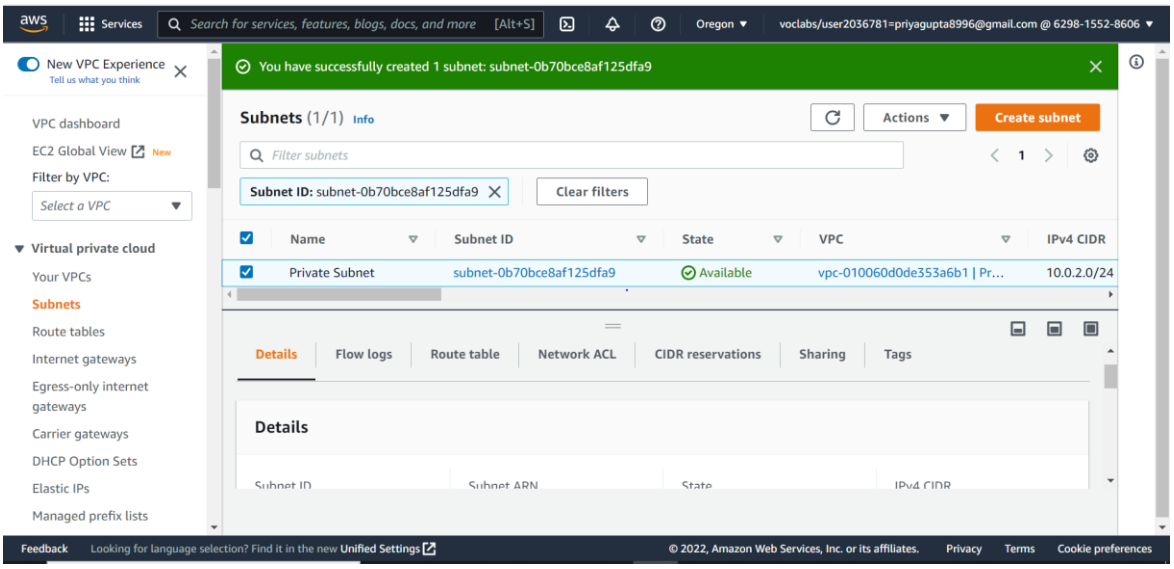
Step number	b	
Step name	Creation of public subnet	
Expected screenshots	• Subnet Creation screen	

Subnet creation screen result:



Step number	c
Step name	Creation of private subnet
Expected screenshots	• Subnet Creation screen

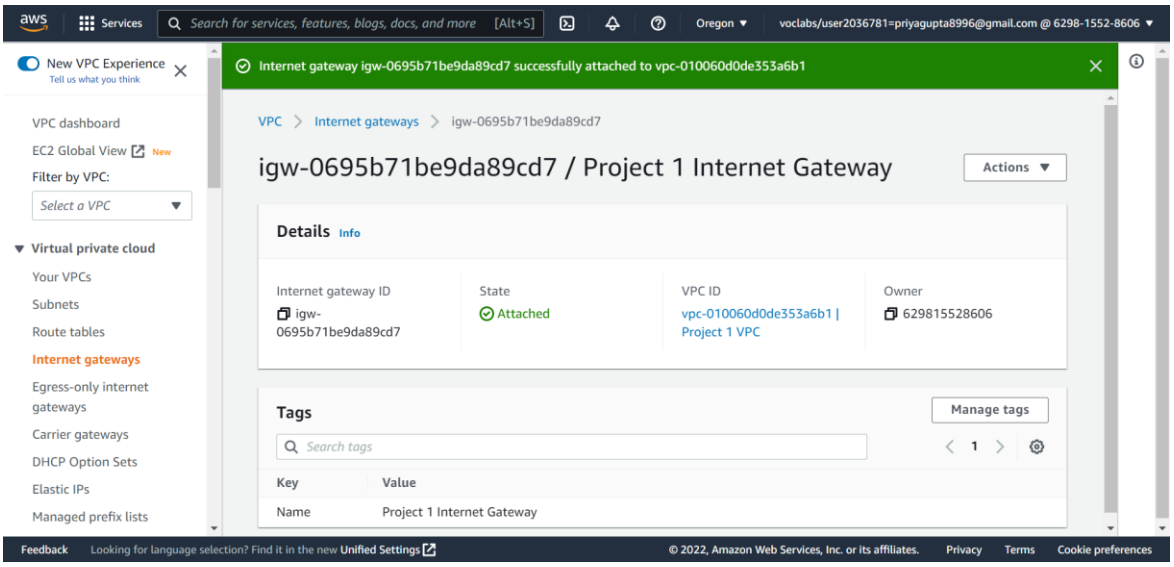
Subnet Creation screen



Step 2 : Internet Gateway and VPC

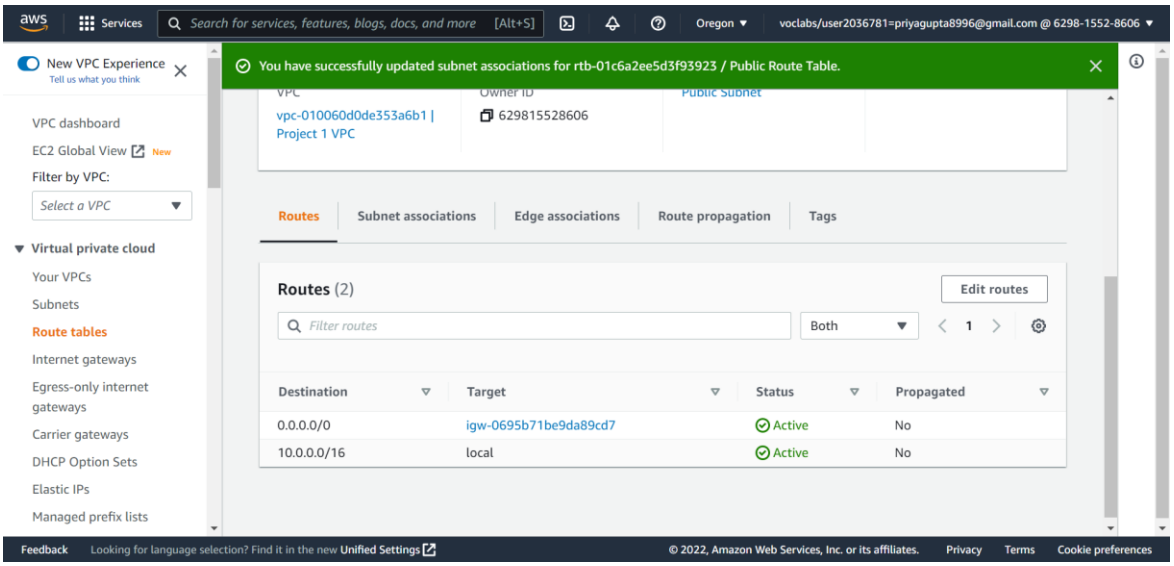
Step number	a	
Step name	Creation and Configuration of Internet Gateway	
Expected screenshots	• Creation of Internet Gateway	

Creation of Internet Gateway

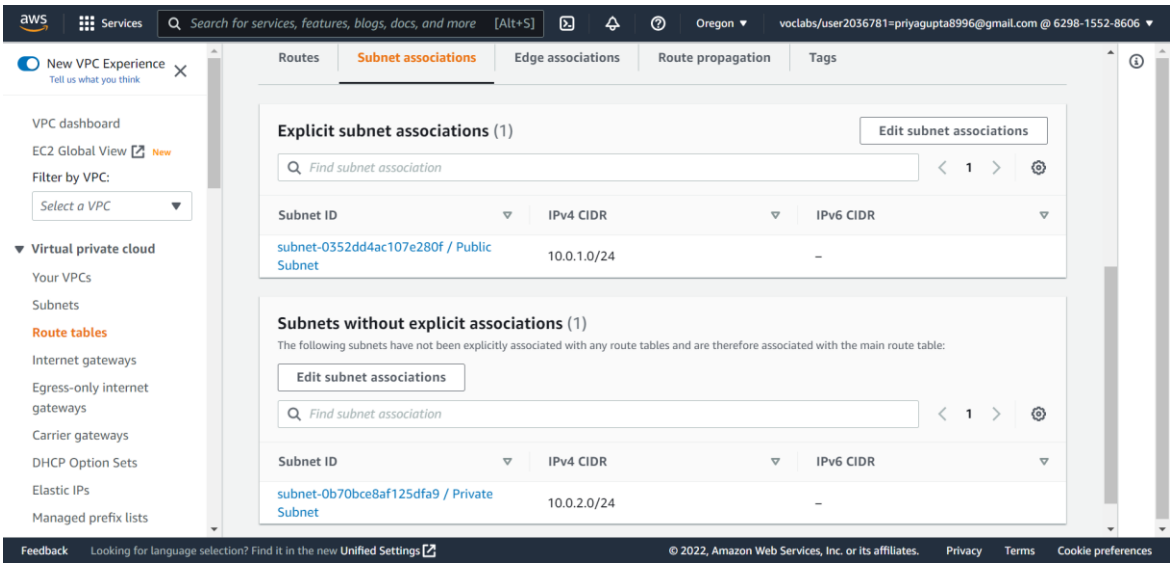


Step number	b
Step name	Creation of public route table
Expected screenshots	• Route list of the route table • Subnet Associations of the route table

Route list of route table

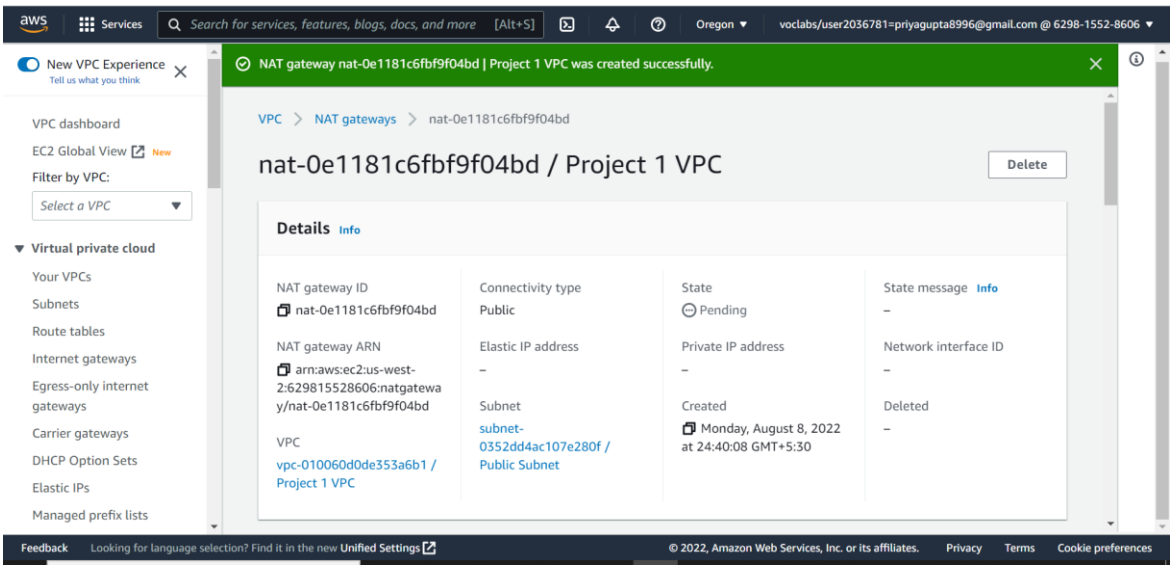


Subnet Associations of the route table

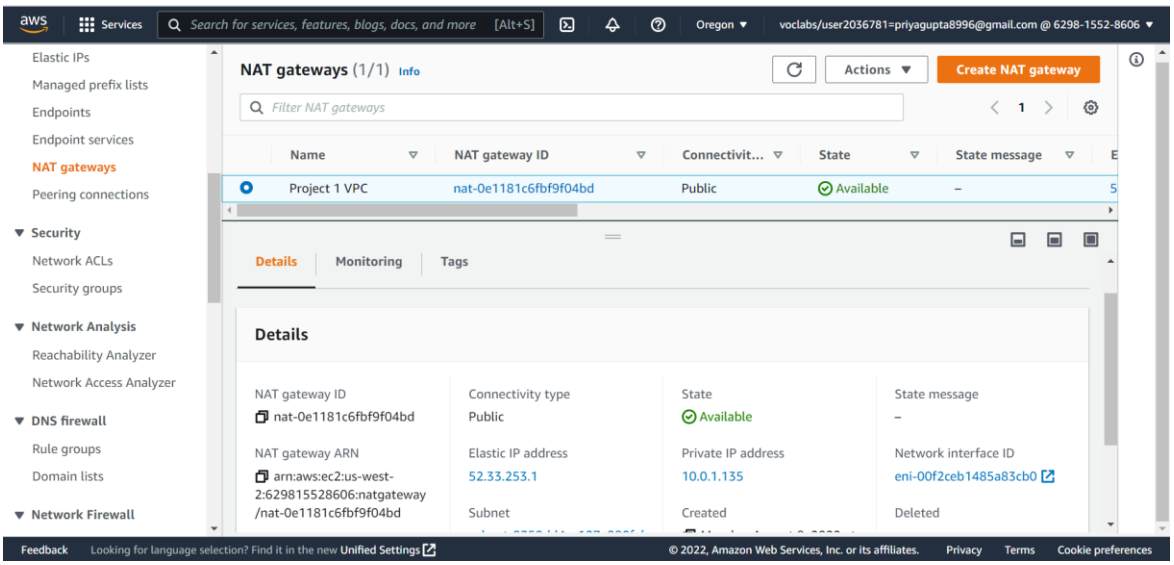


Step number	c			
Step name	Creation of NAT gateway			
Expected screenshots	• NAT gateway creation details • Gateway after creation			

NAT gateway creation details:

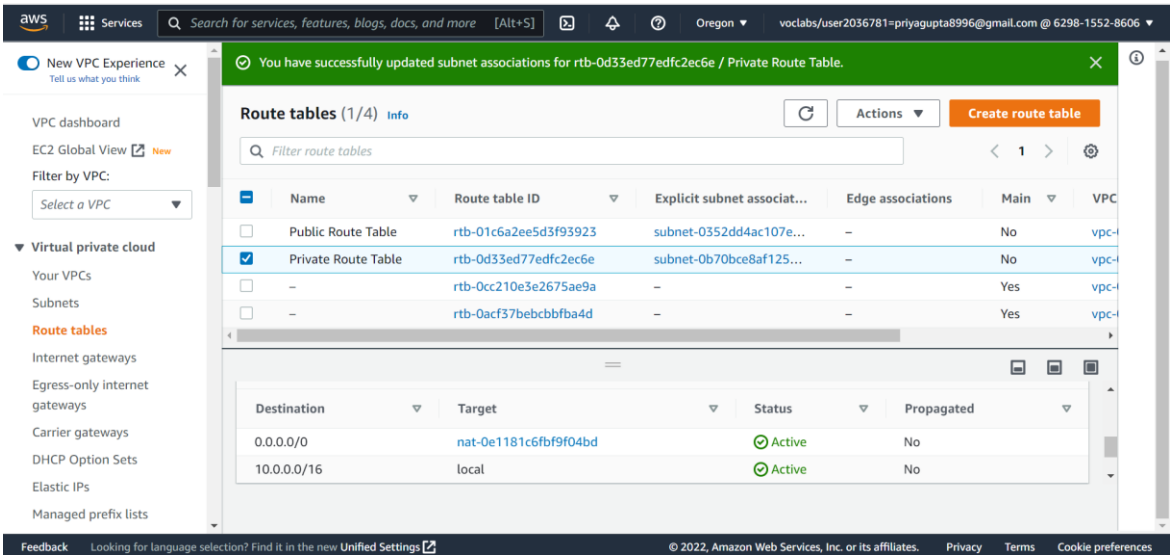


Gateway after creation:

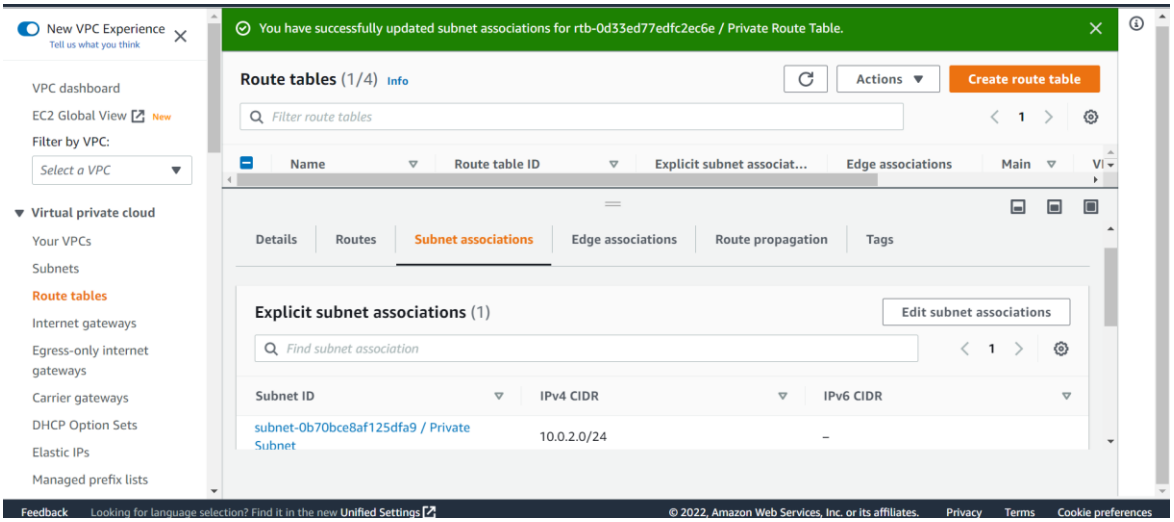


Step number	d			
Step name	Creation of private route tables			
Expected screenshots	• Route list of the route table • Subnet association of the route table			

Route list of the route table



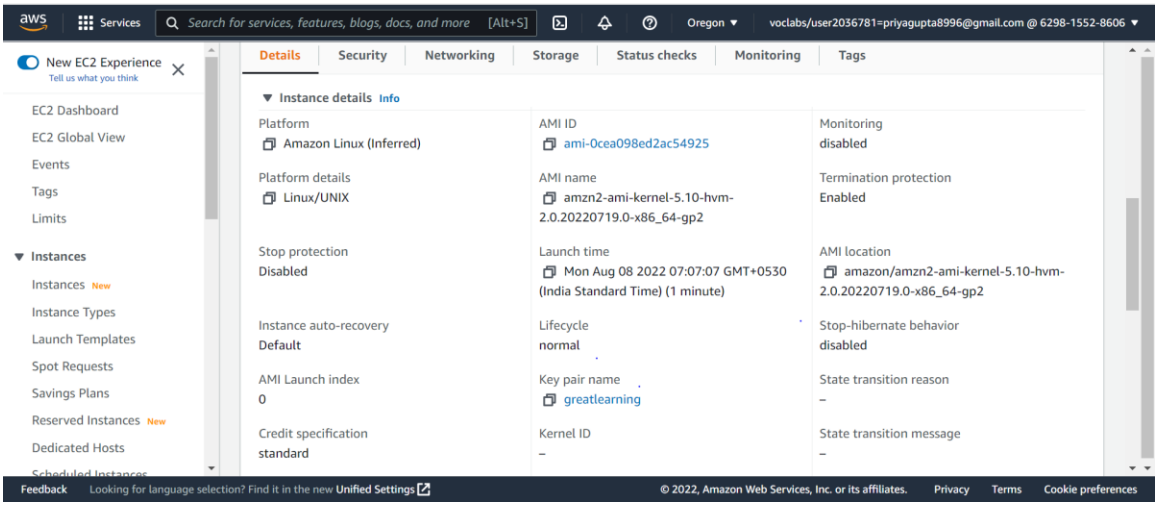
Subnet association of the route table



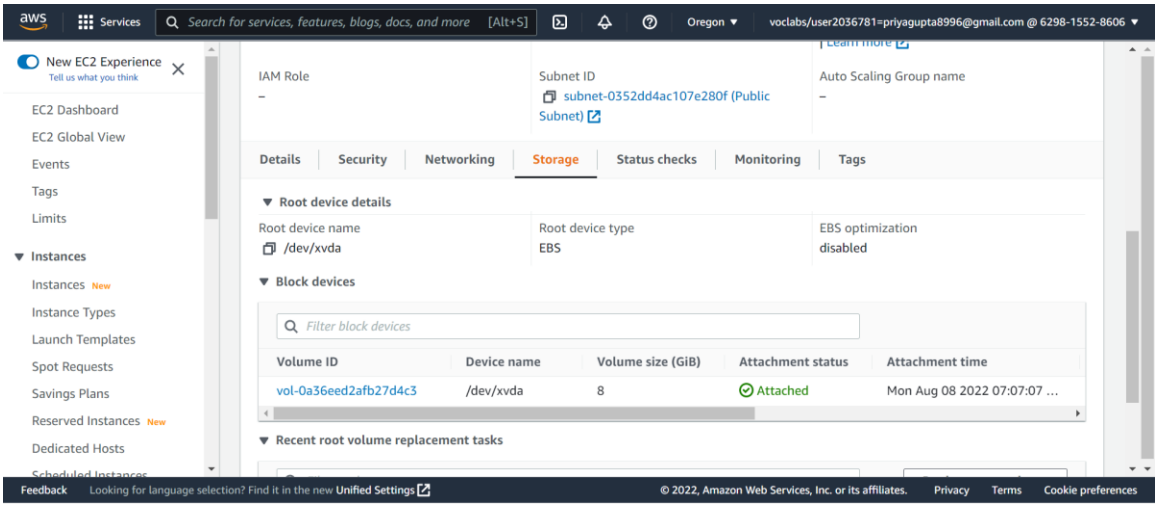
Step 3 : Creation of database and application servers

Step number	a
Step name	Creation of application server
Expected screenshots	• AMI used • Instance configuration screen • Security group rules • Instance after creation

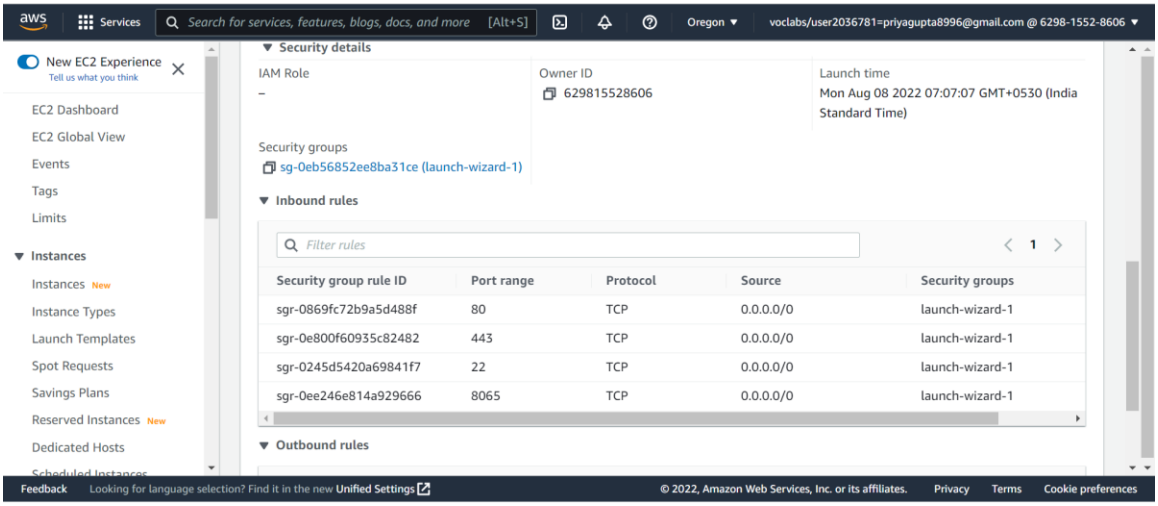
AMI used



Instance configuration screen



Security group rules



Instance after creation