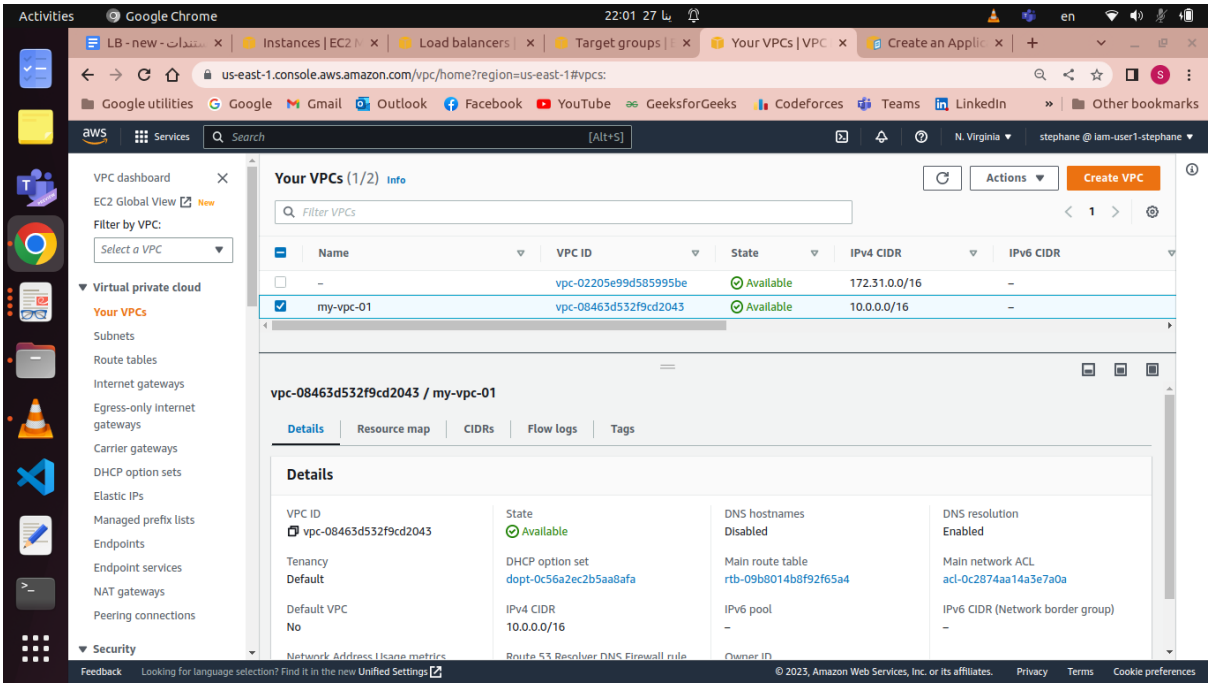
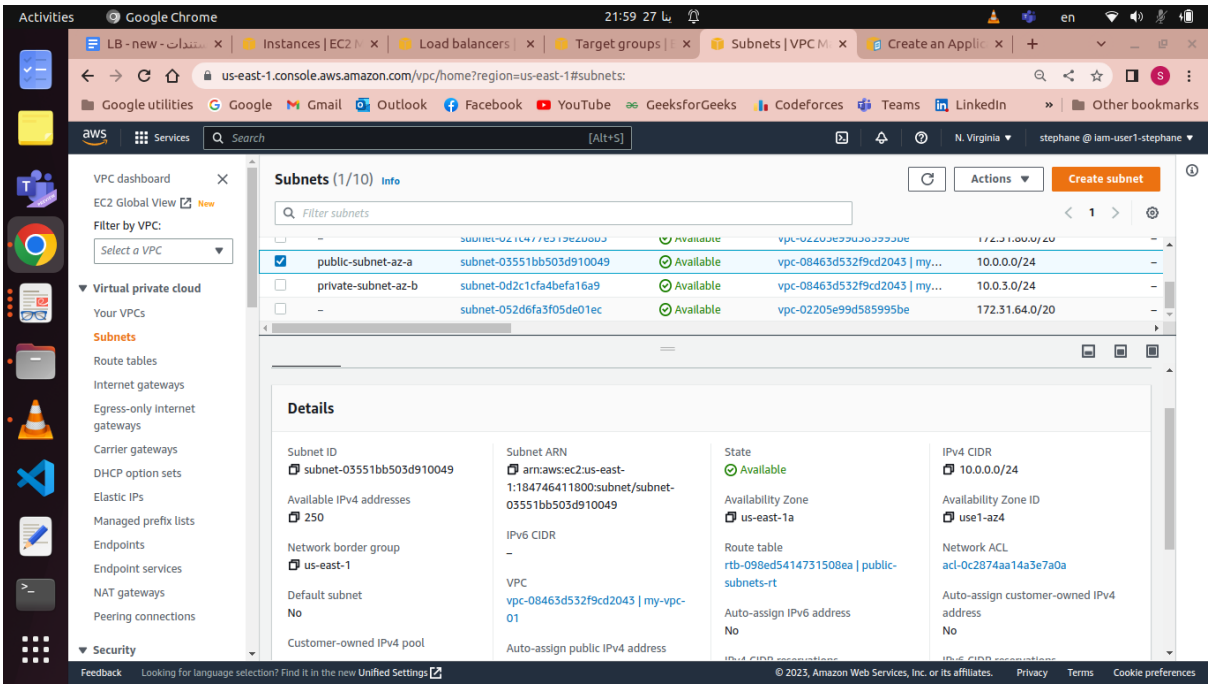
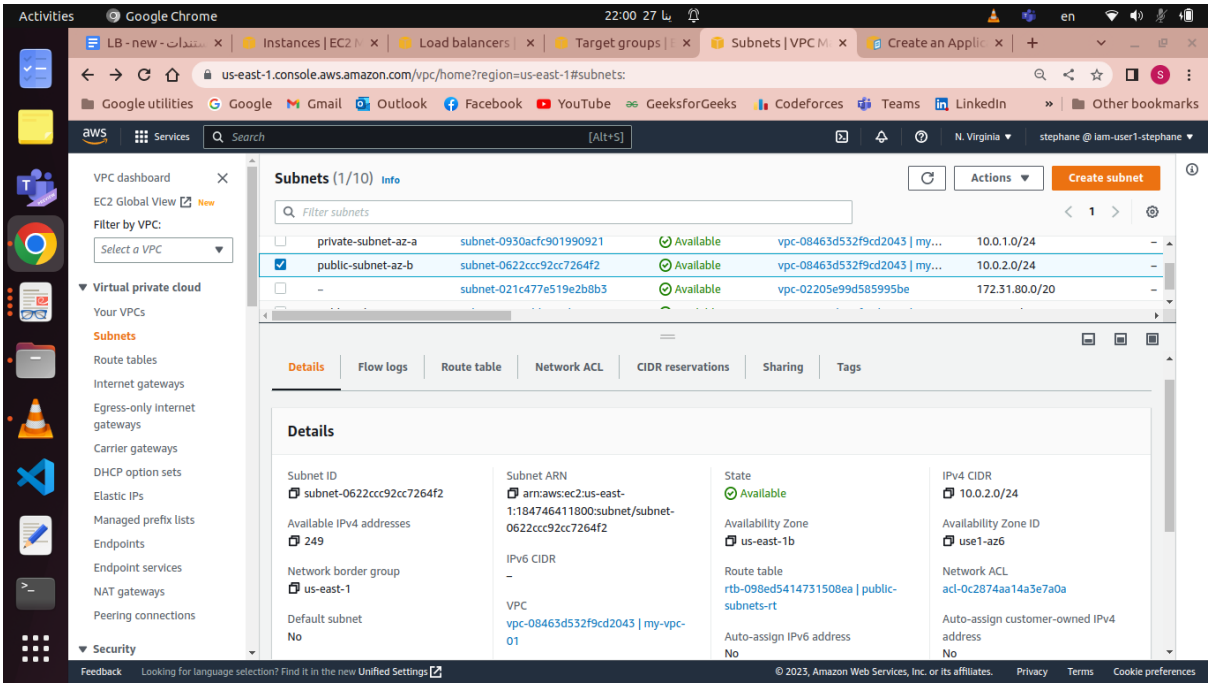
1. Create vpc:



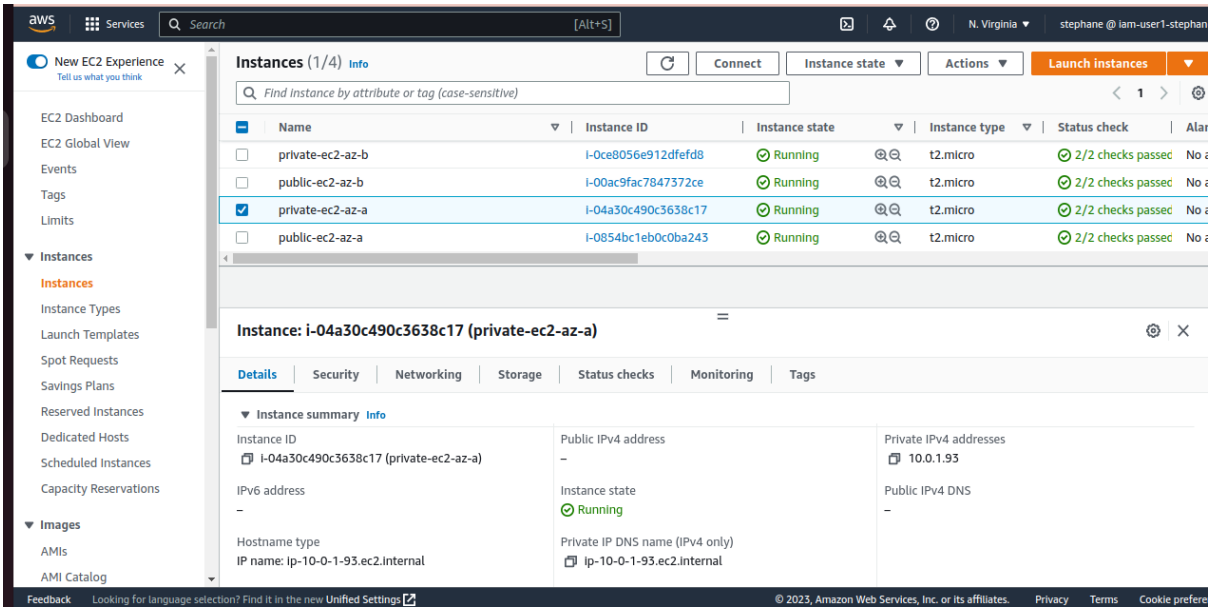
2. Create public subnet - a



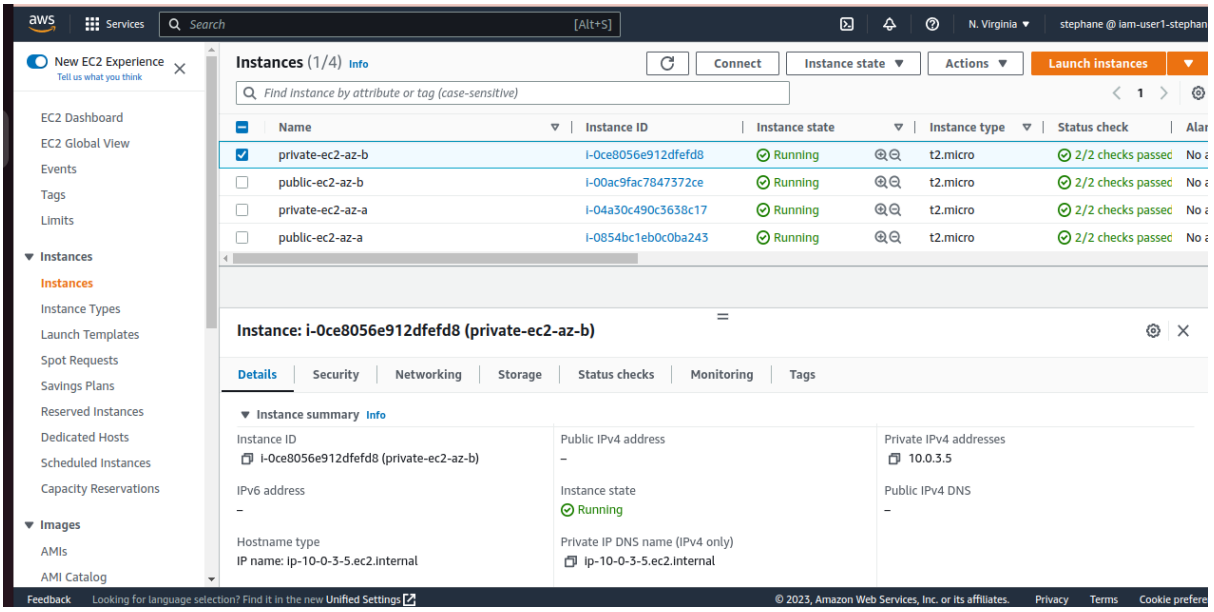
3. Create public subnet - b



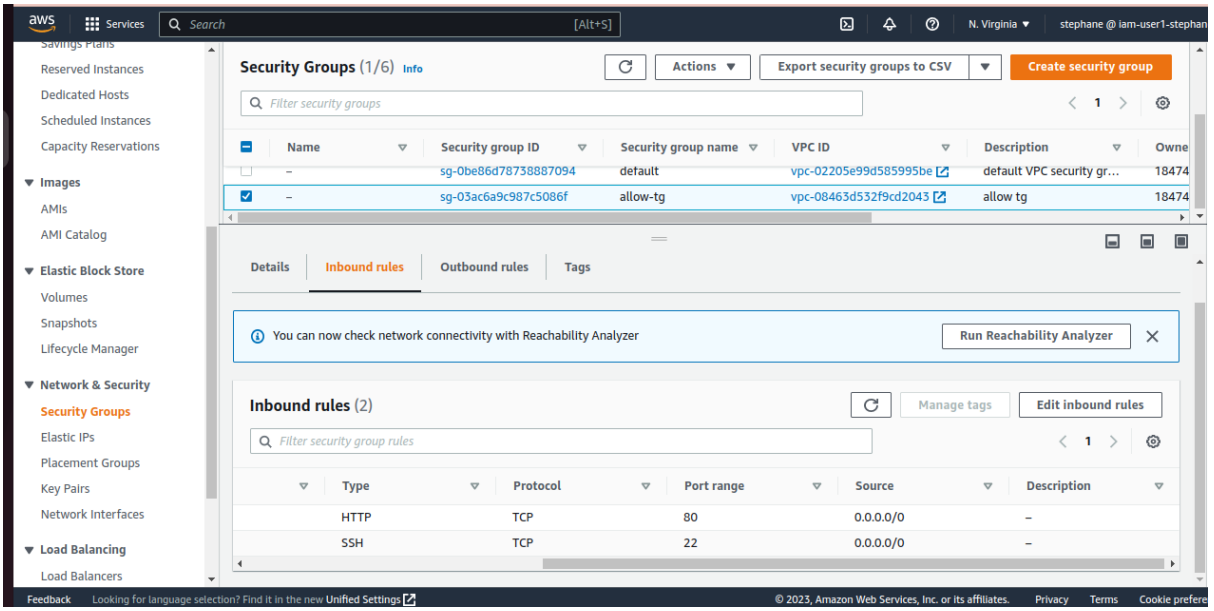
4. private instance - a

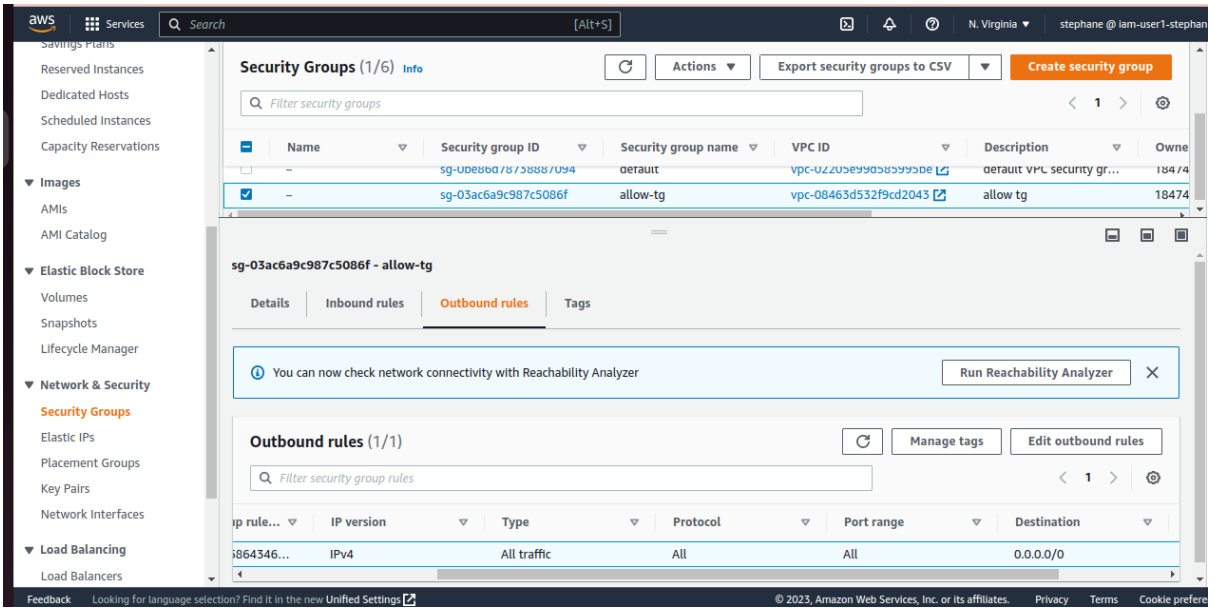


5. private instance - b

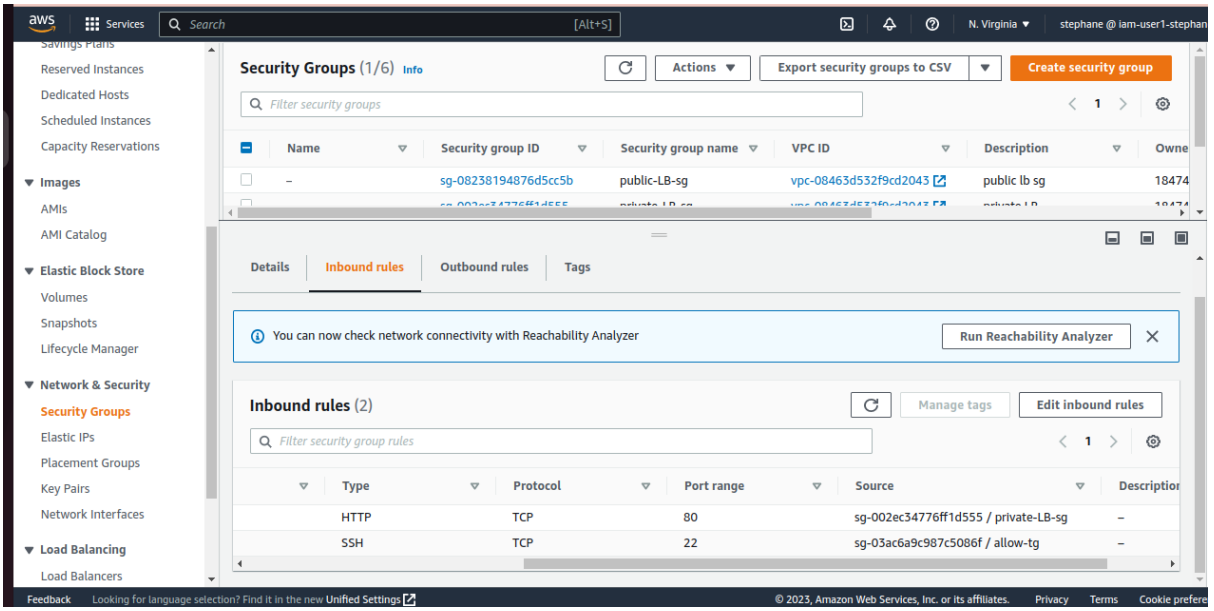


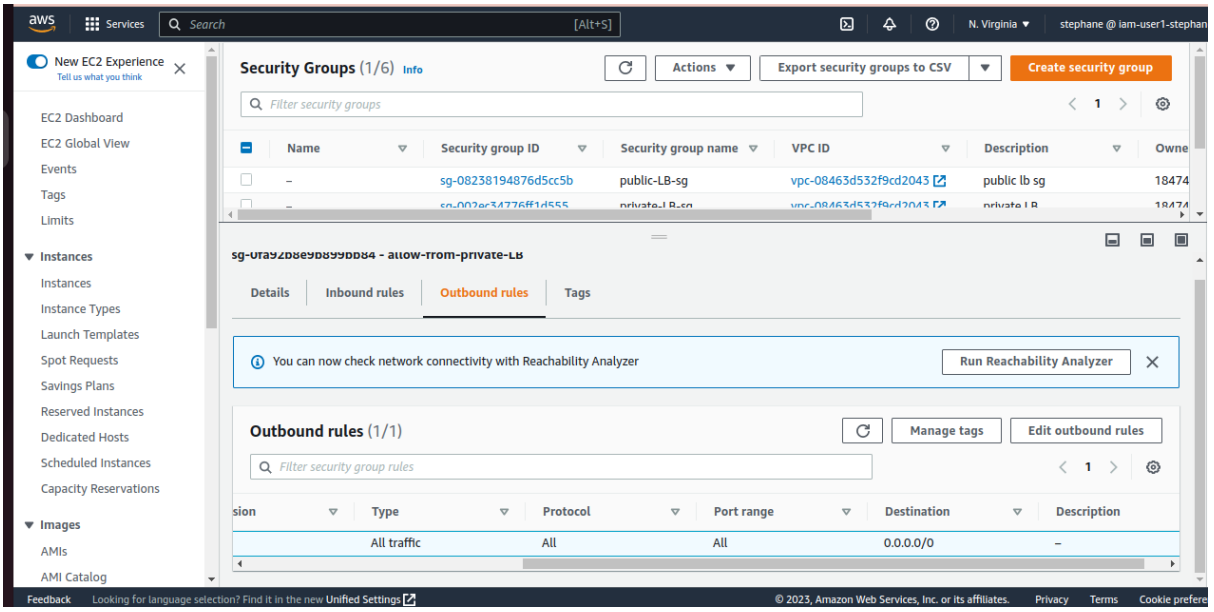
6. security group for both public instances a & b:



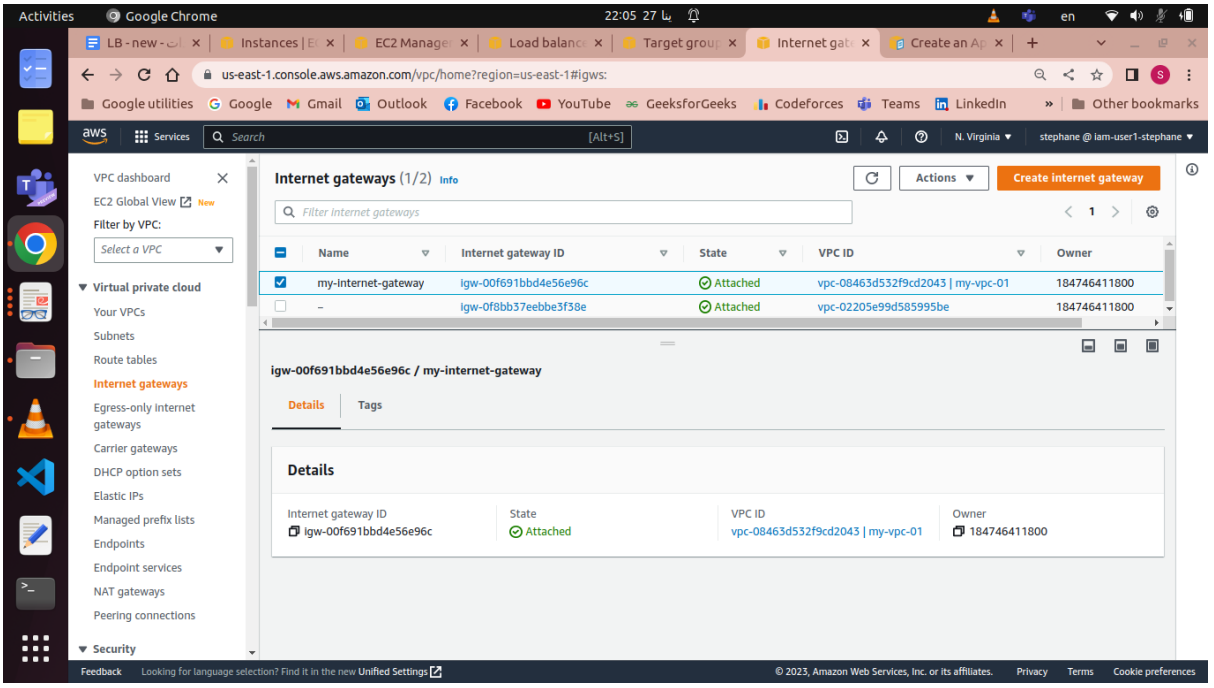


7. security group of private subnets:

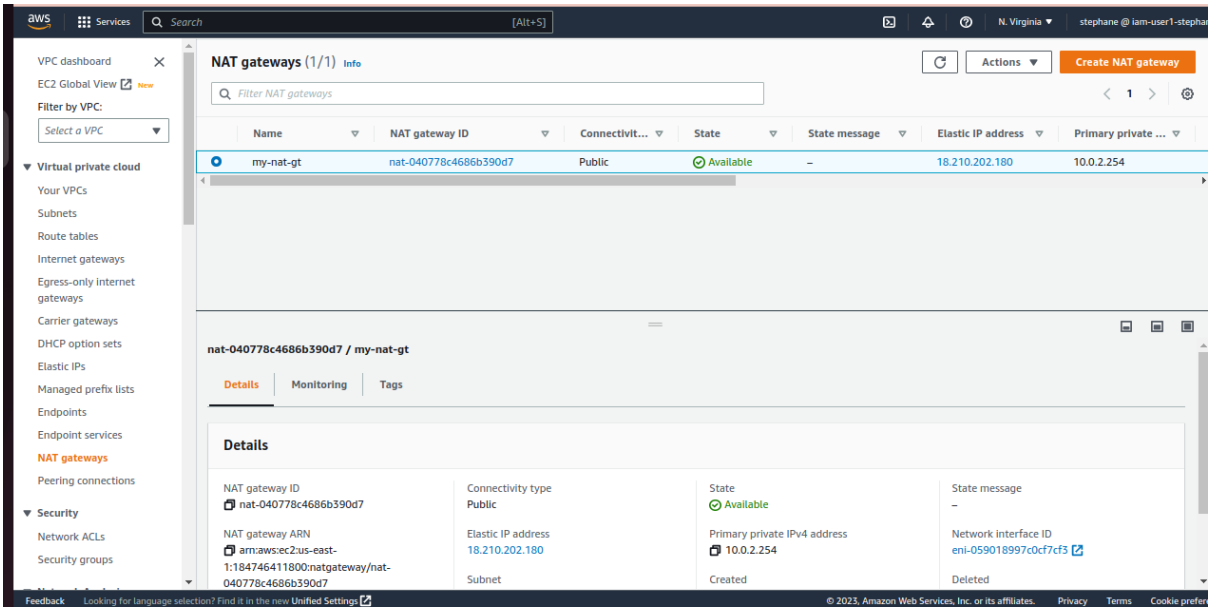




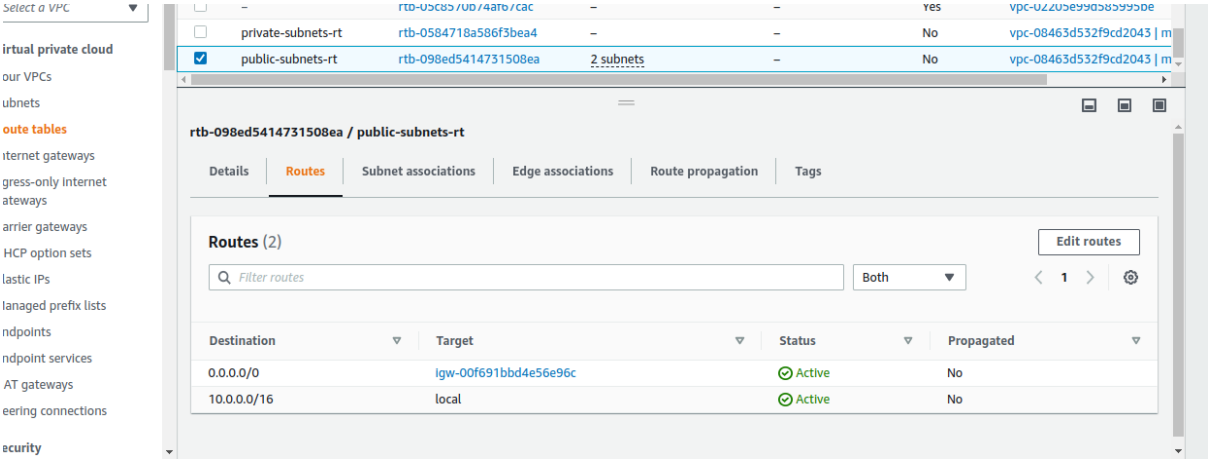
8. Internet gateway:



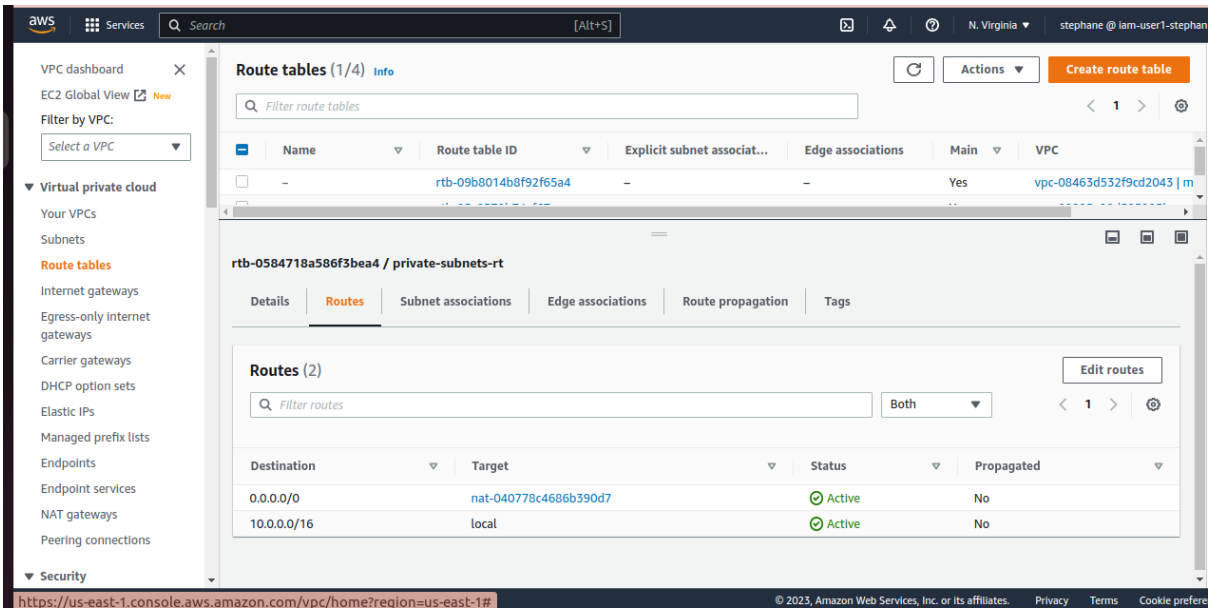
9. nat:



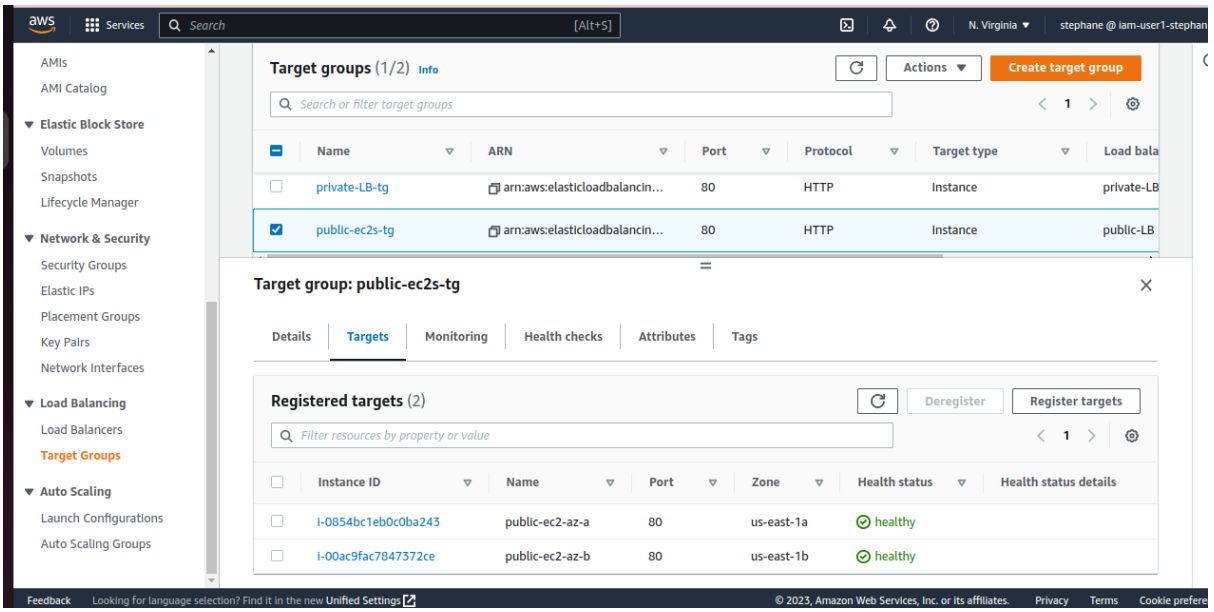
10. route table for the public subnets:



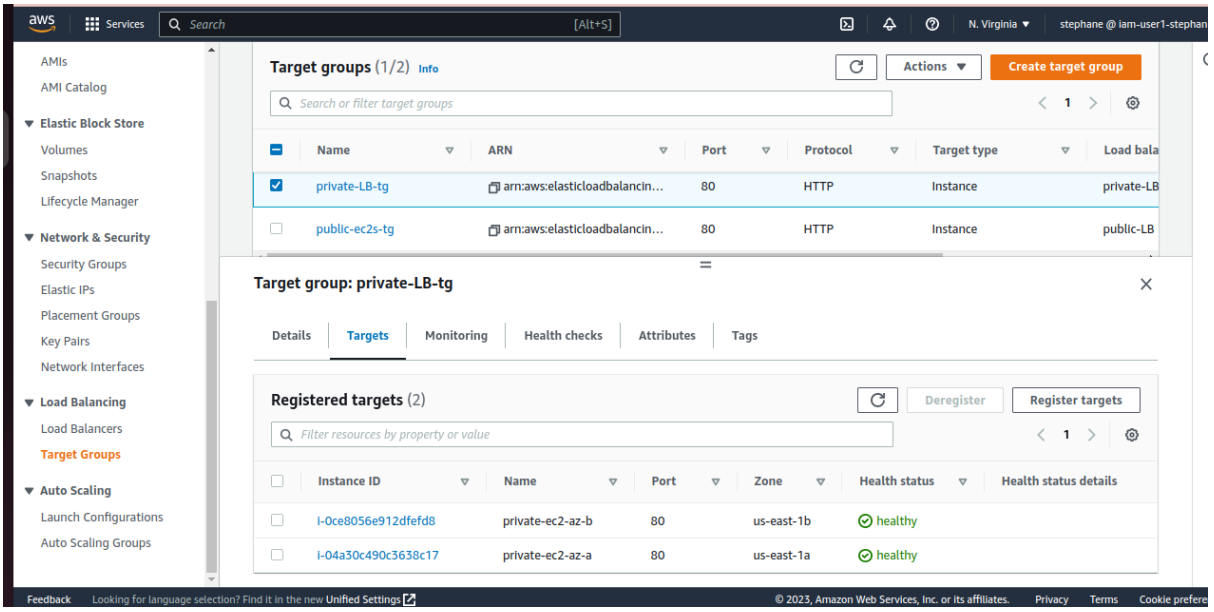
11. route table for the private subnets:



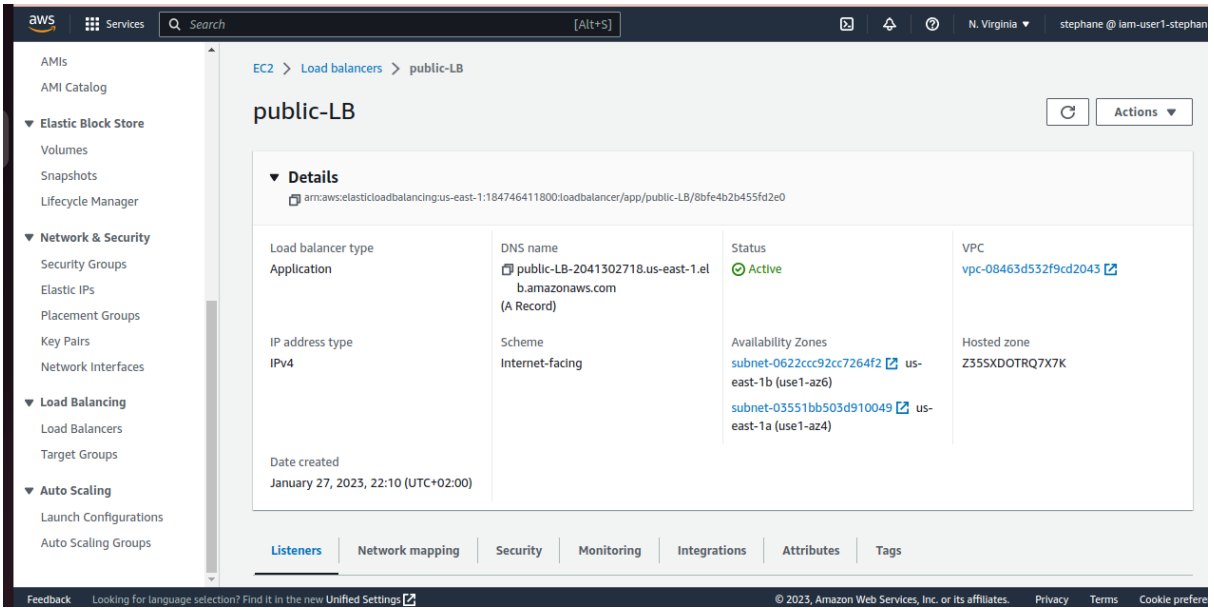
12. target group of the public ec2s:



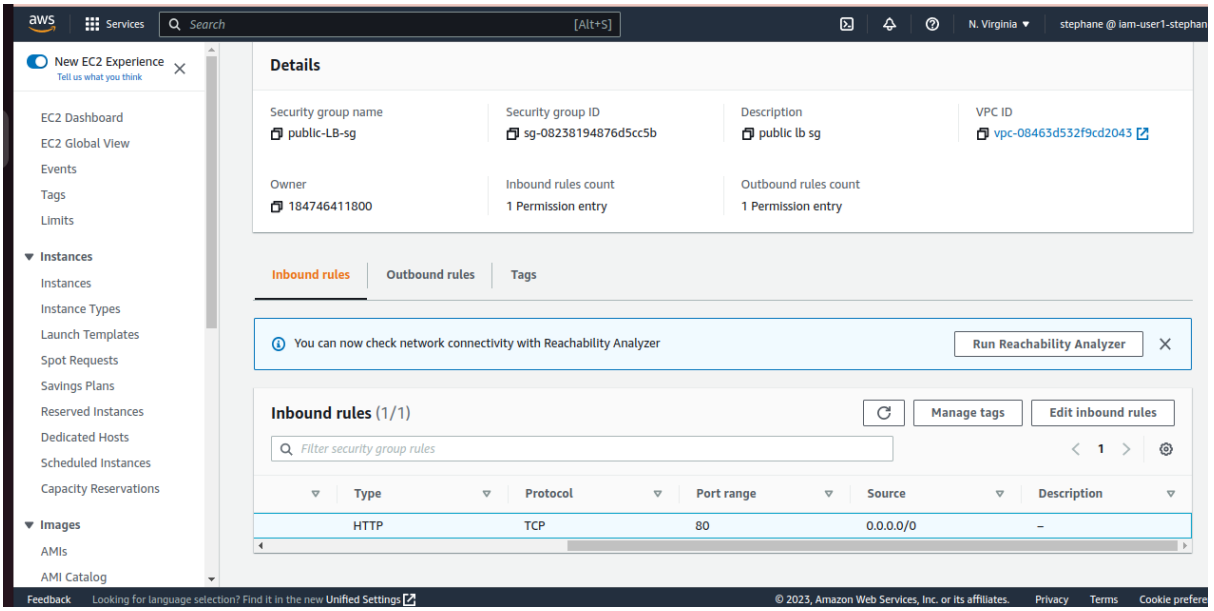
13. target group of the private ec2s:

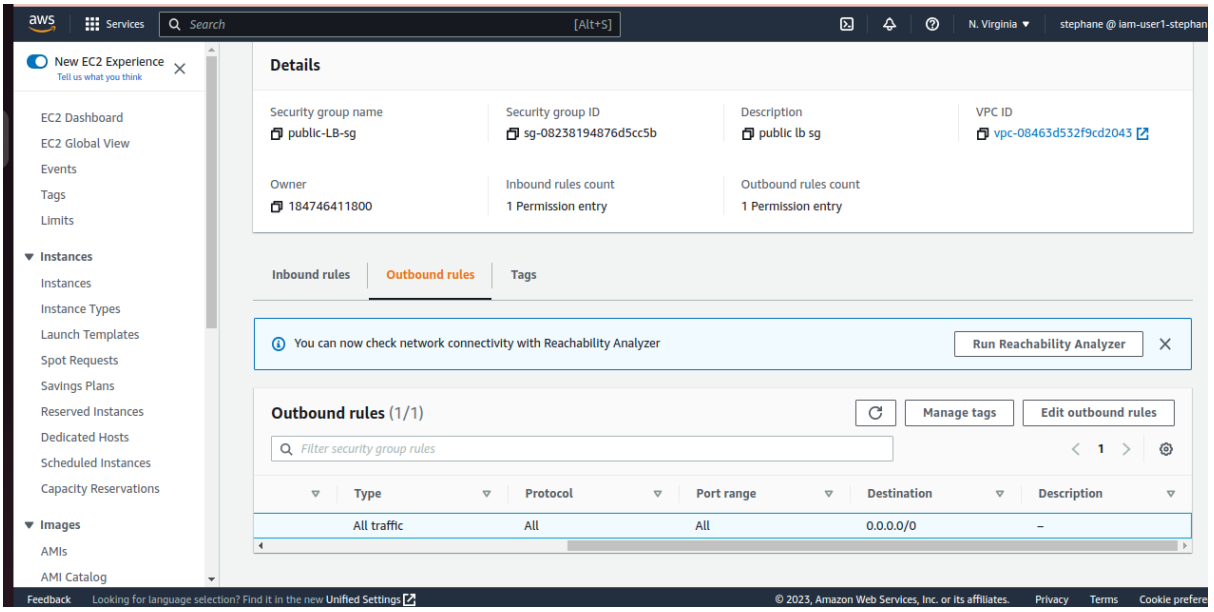


14. Load balancer:

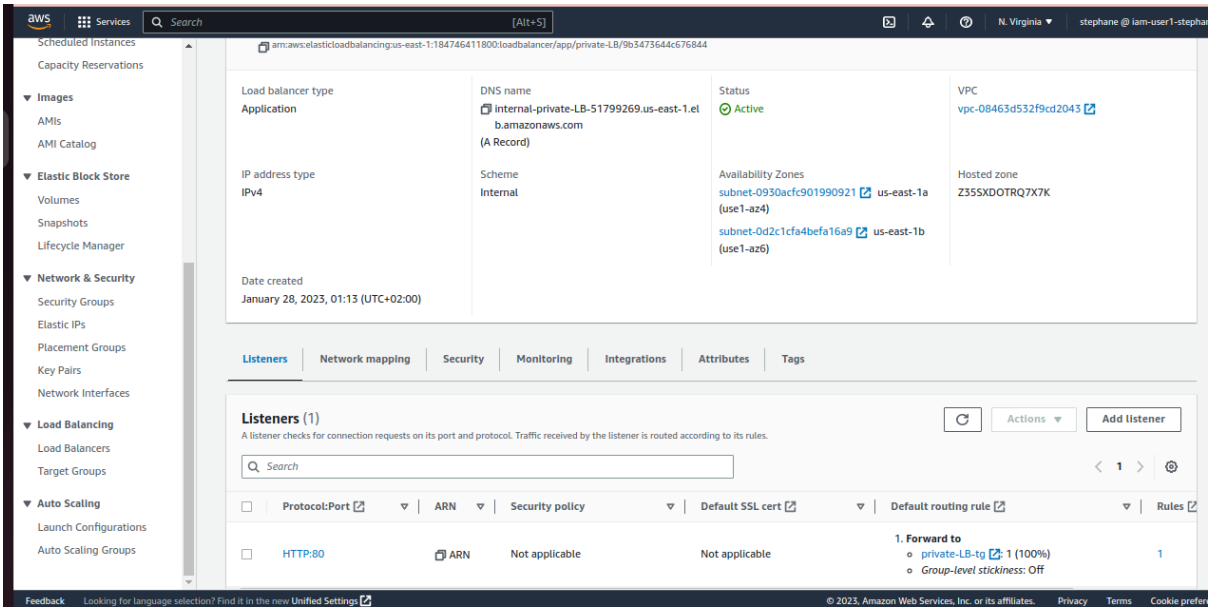


security group of the public-LB:

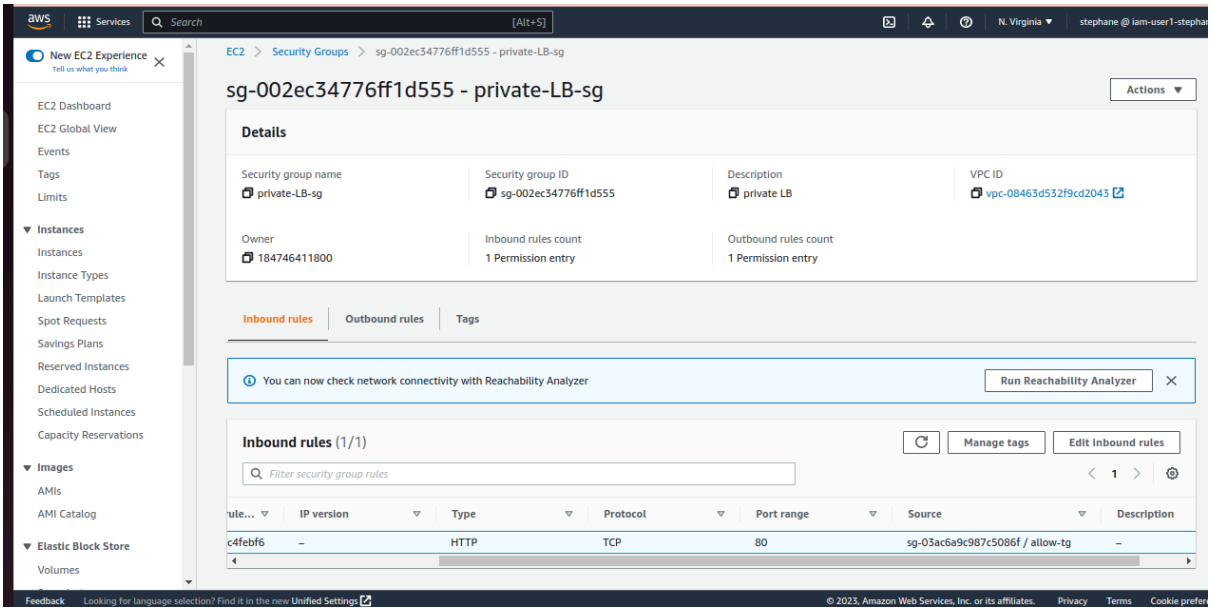


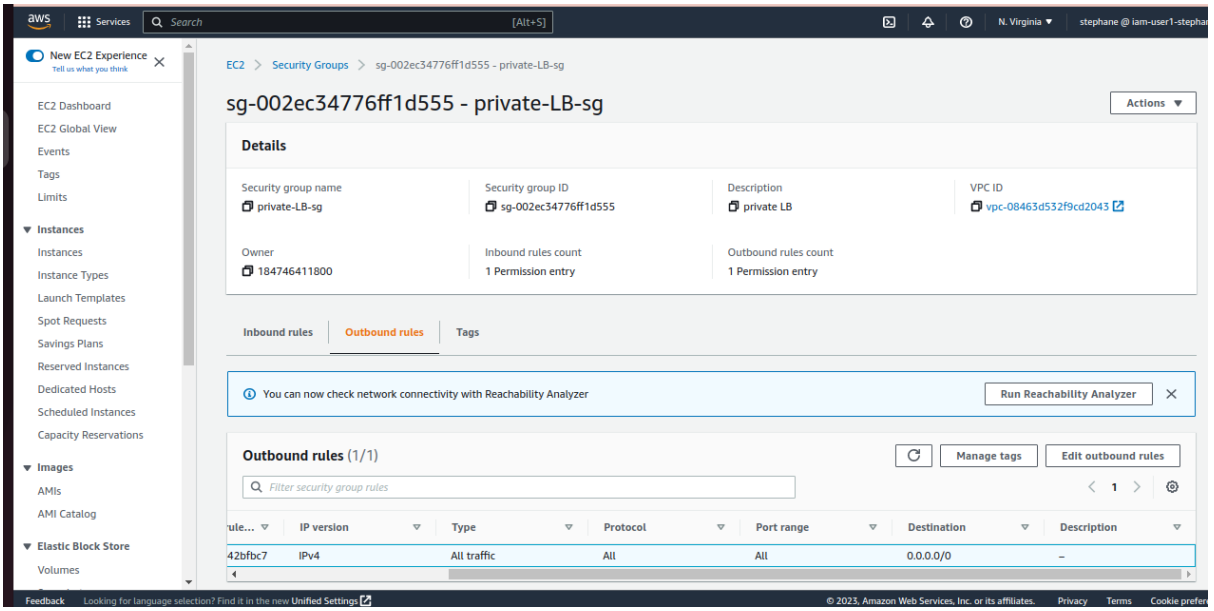


private-LB:

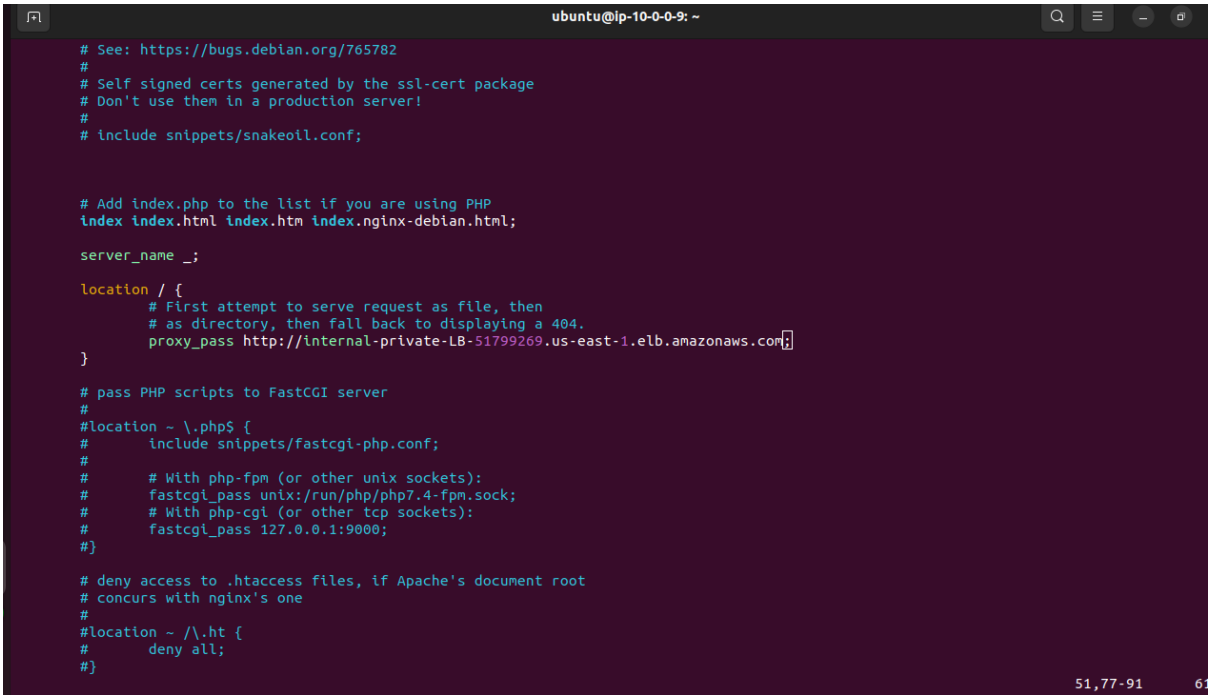


security group of private -LB:





15. reverse proxy of public ec2s:



user data of private ec2s:

```
1 #!/bin/bash
2 sudo apt update -y
3 sudo  apt install nginx -y
4 sudo echo "hello from  ec2 az 1"
5 sudo systemctl enable nginx
6 sudo systemctl start nginx
```

16. output: