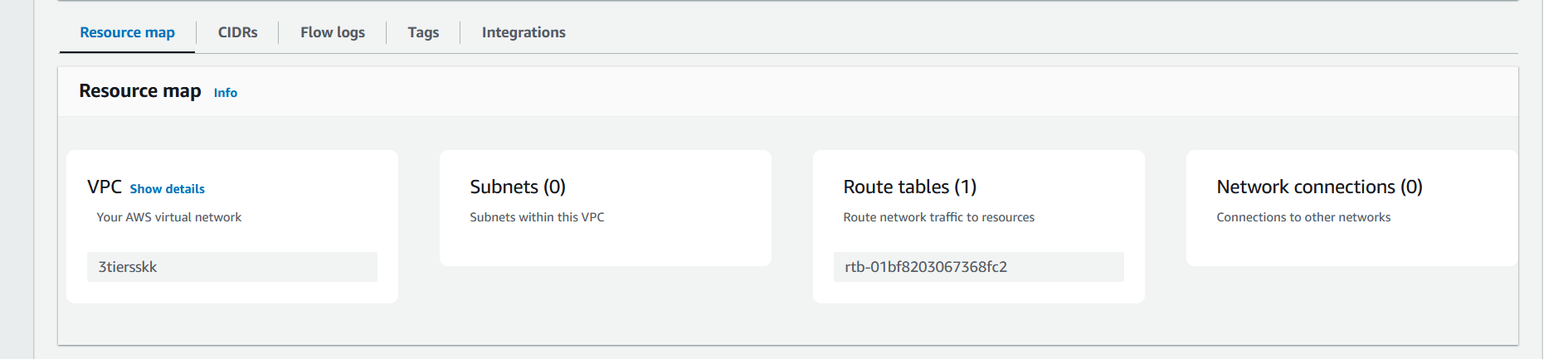
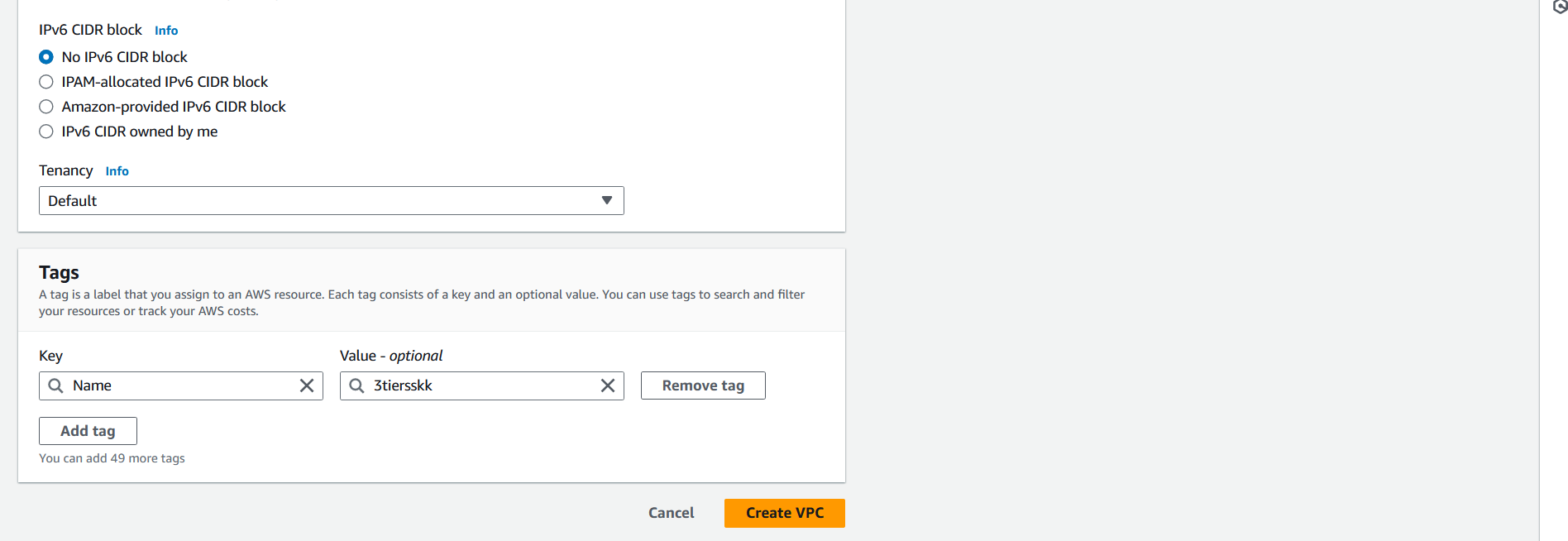
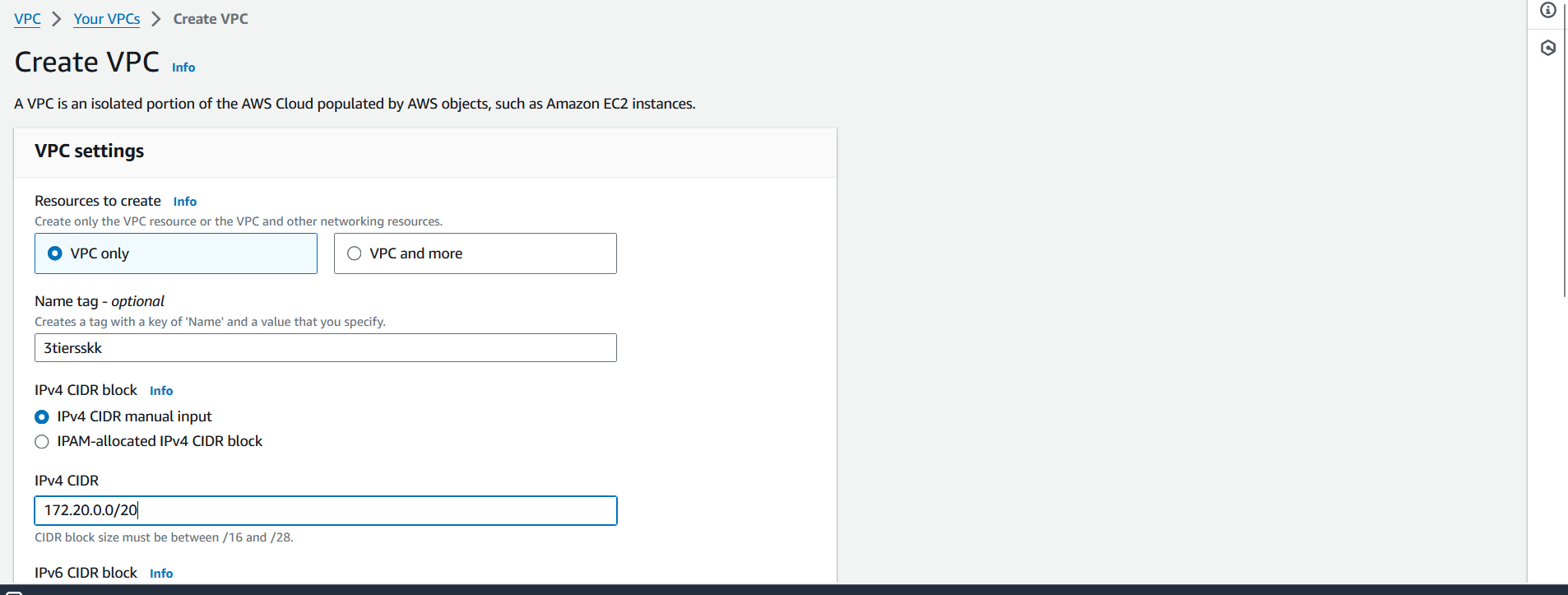
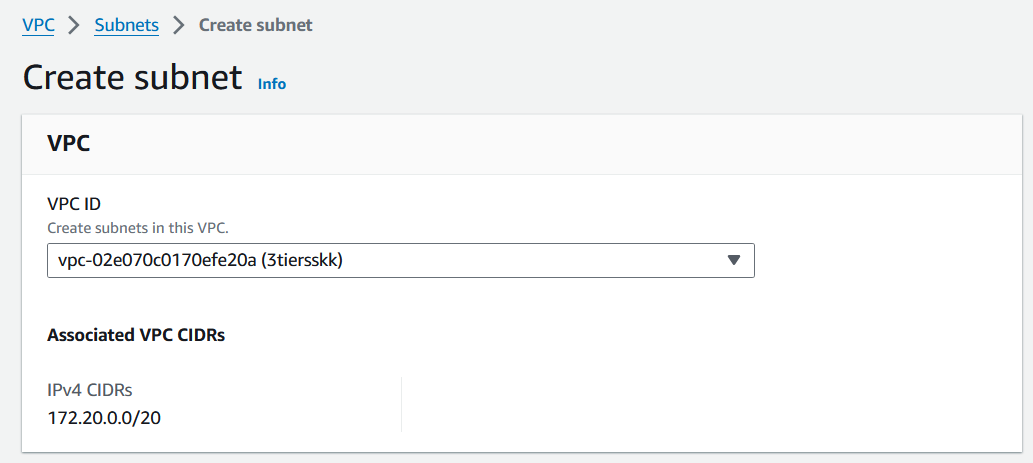
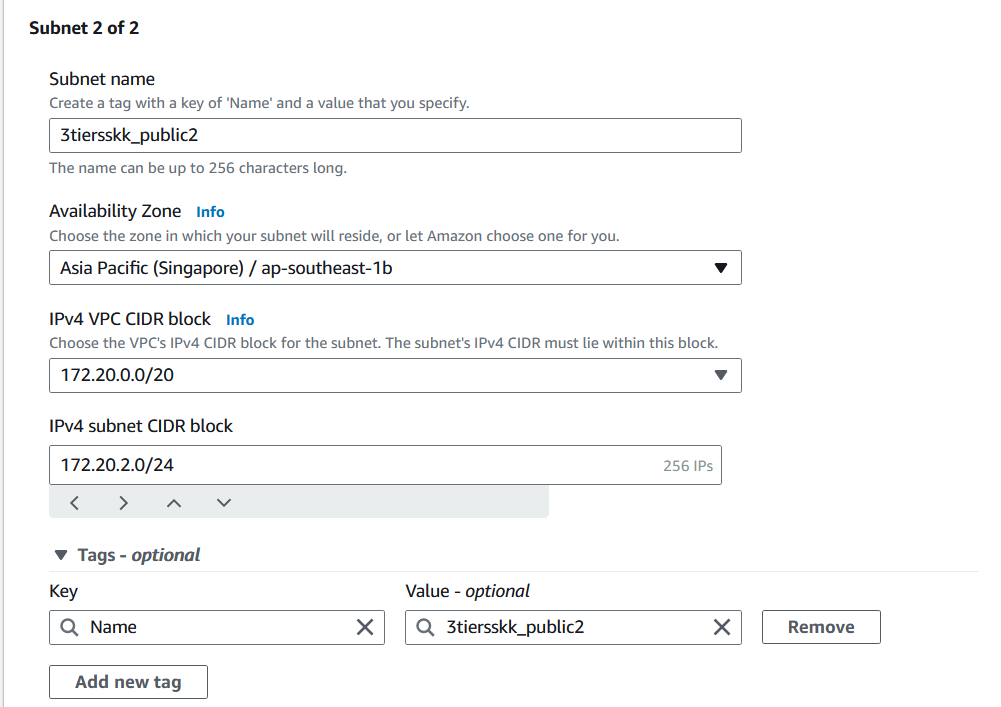
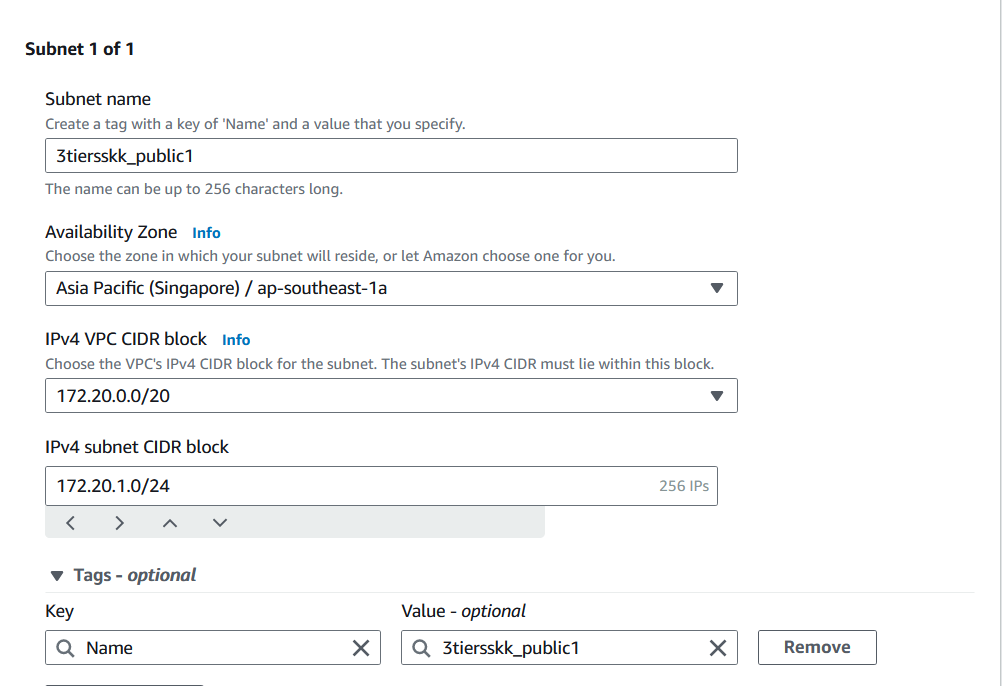
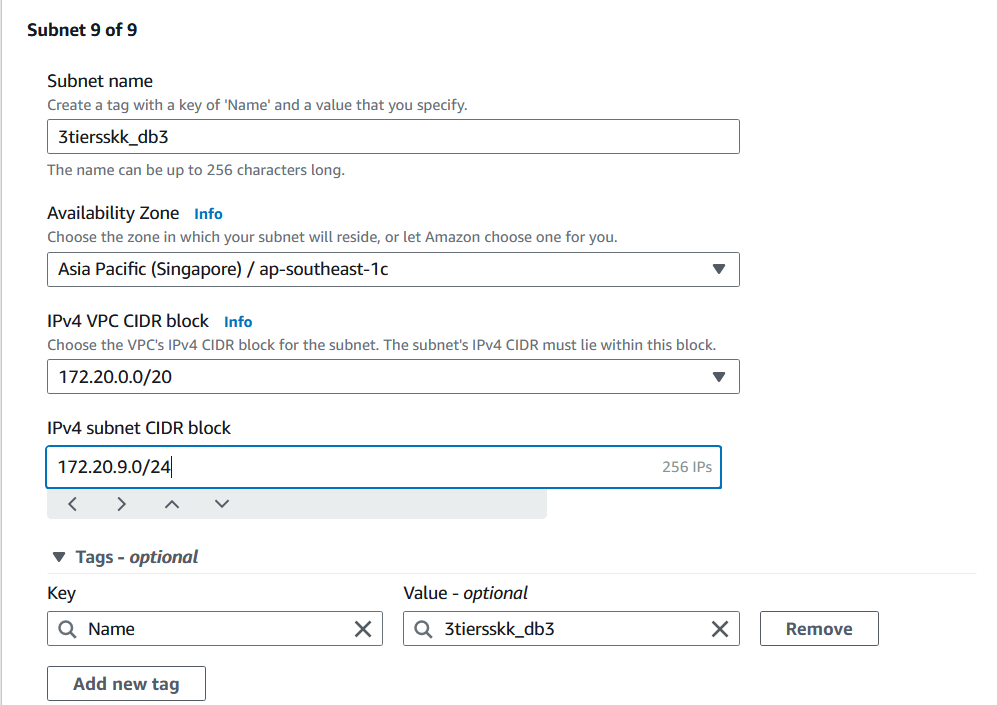
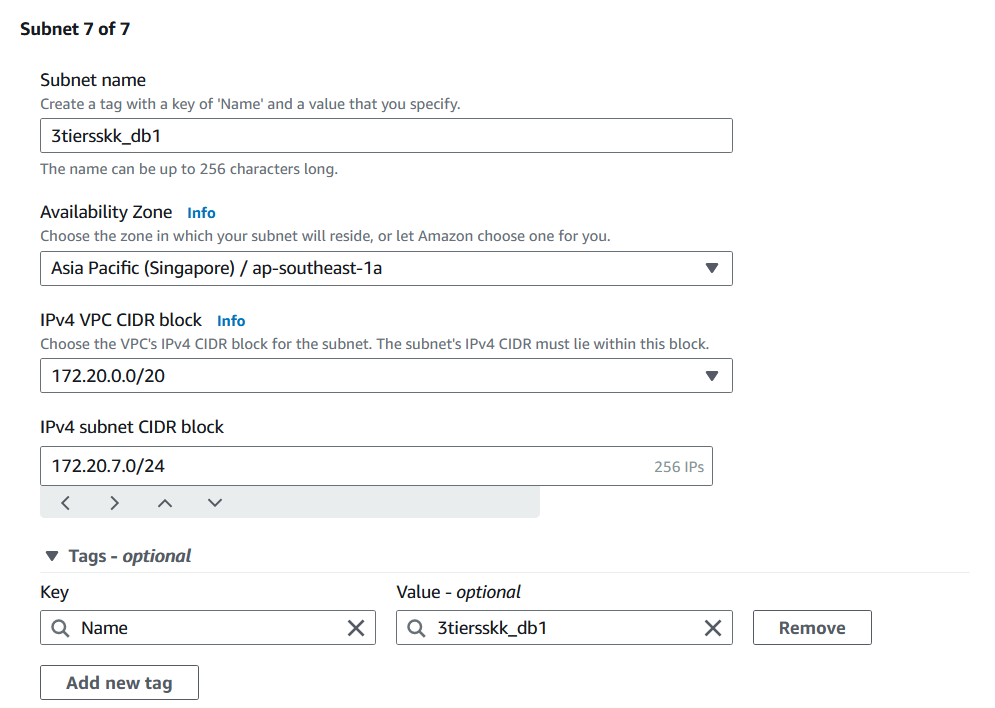
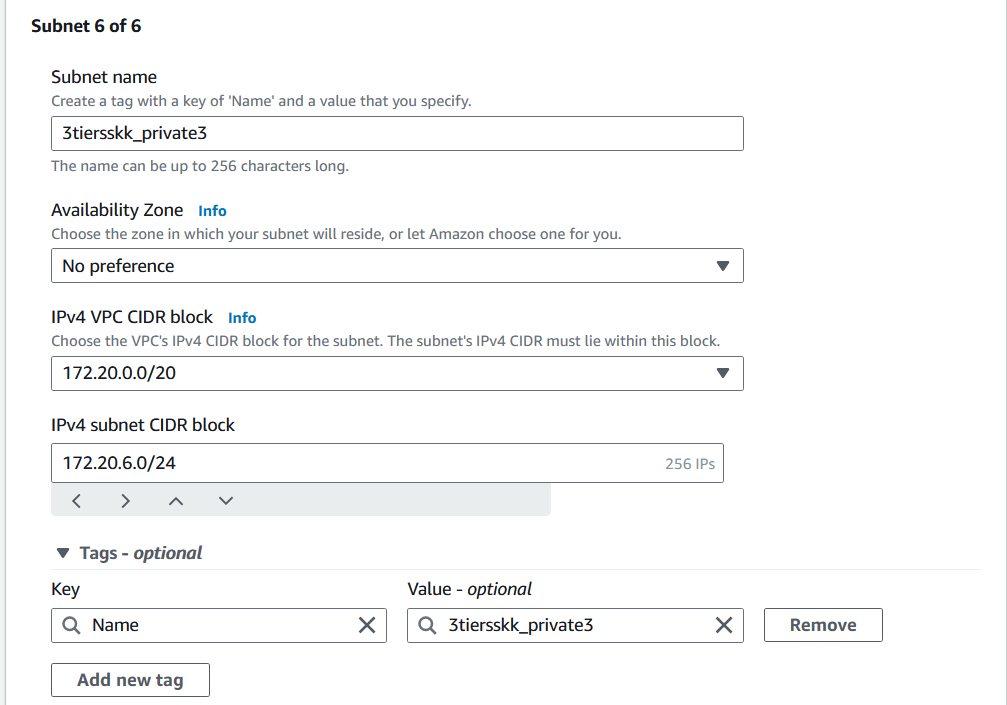
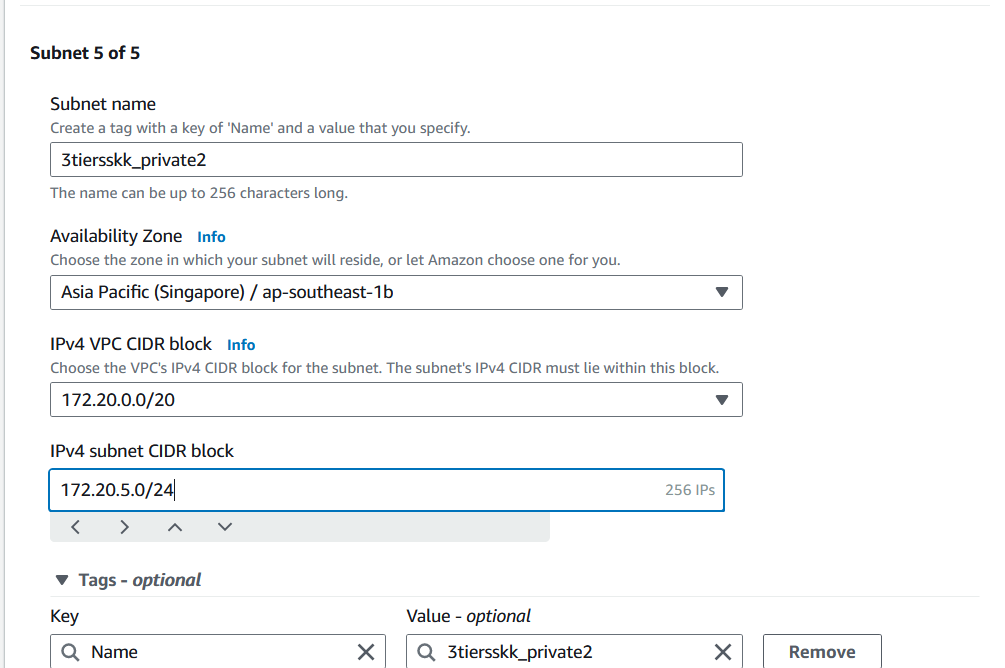
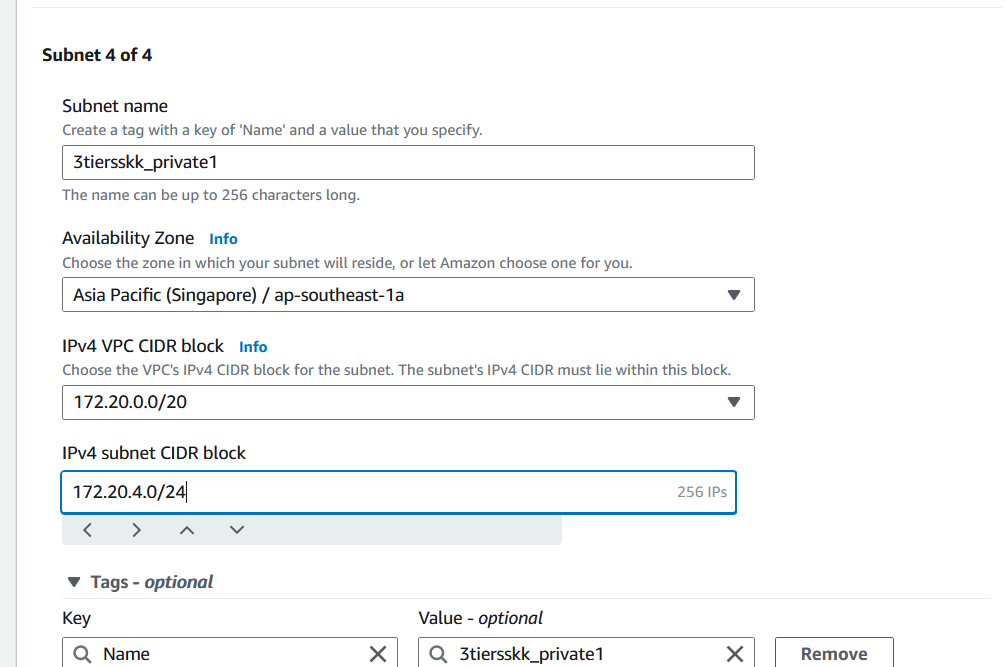
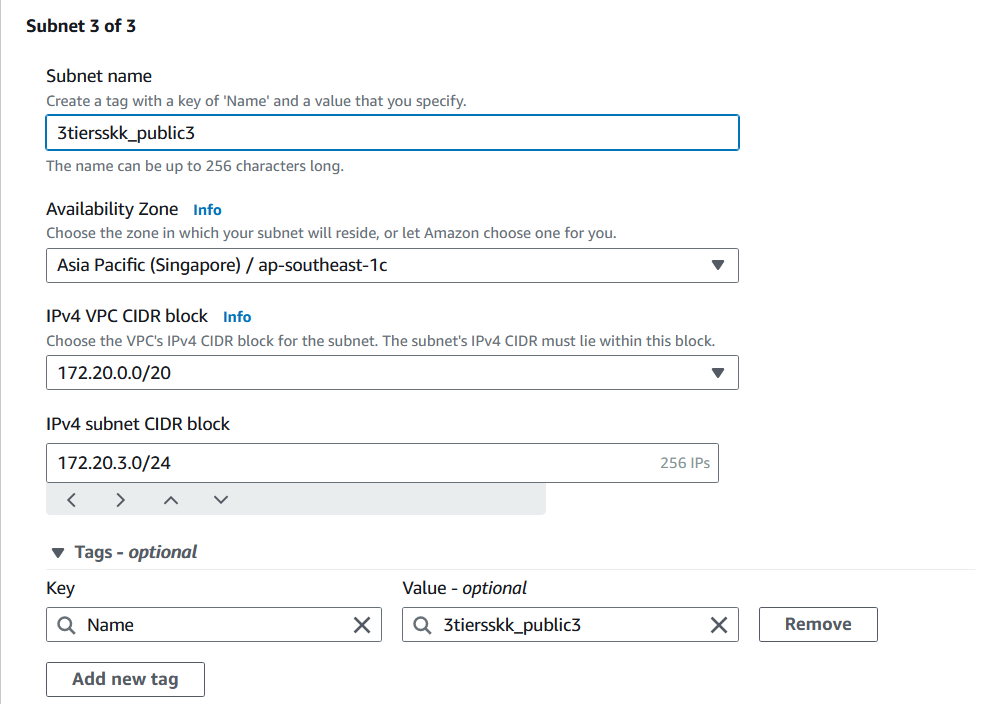
Create VPC

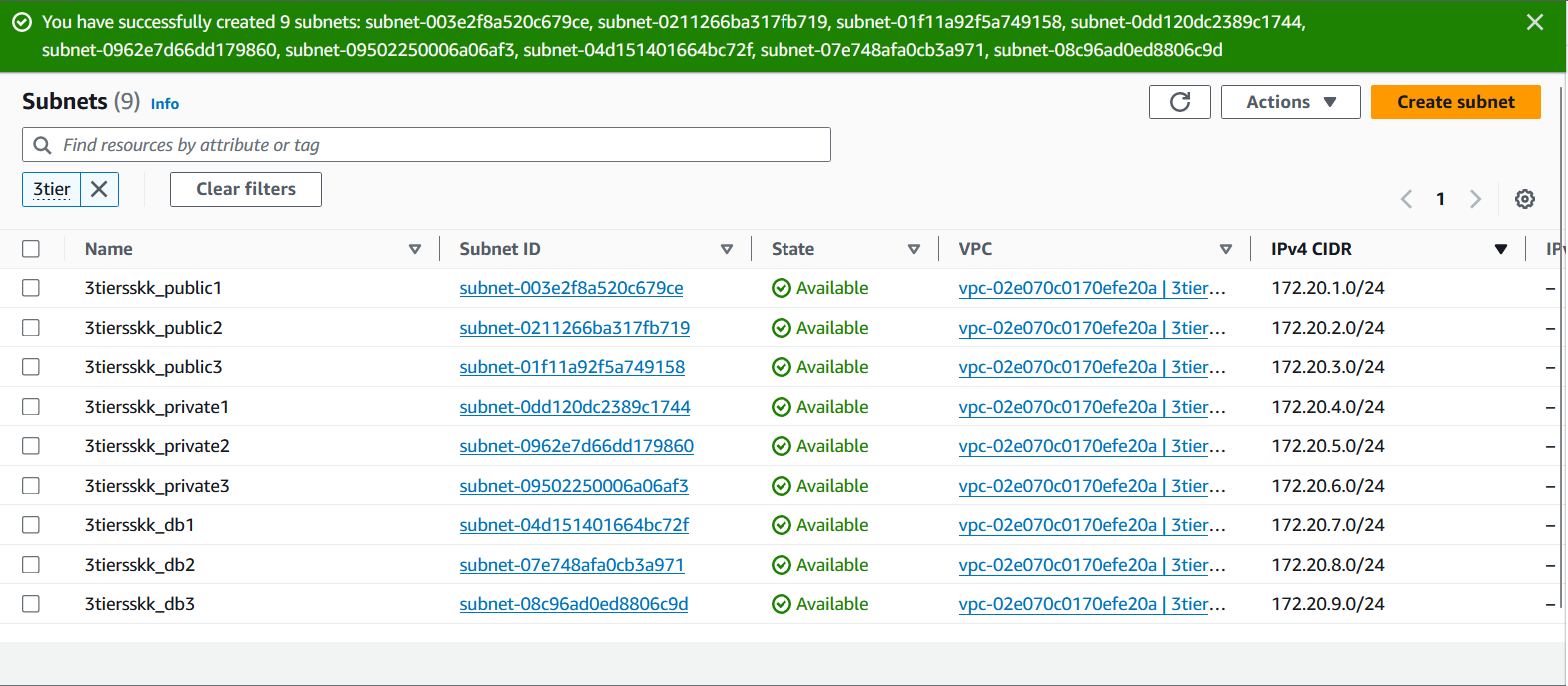


Create subnets

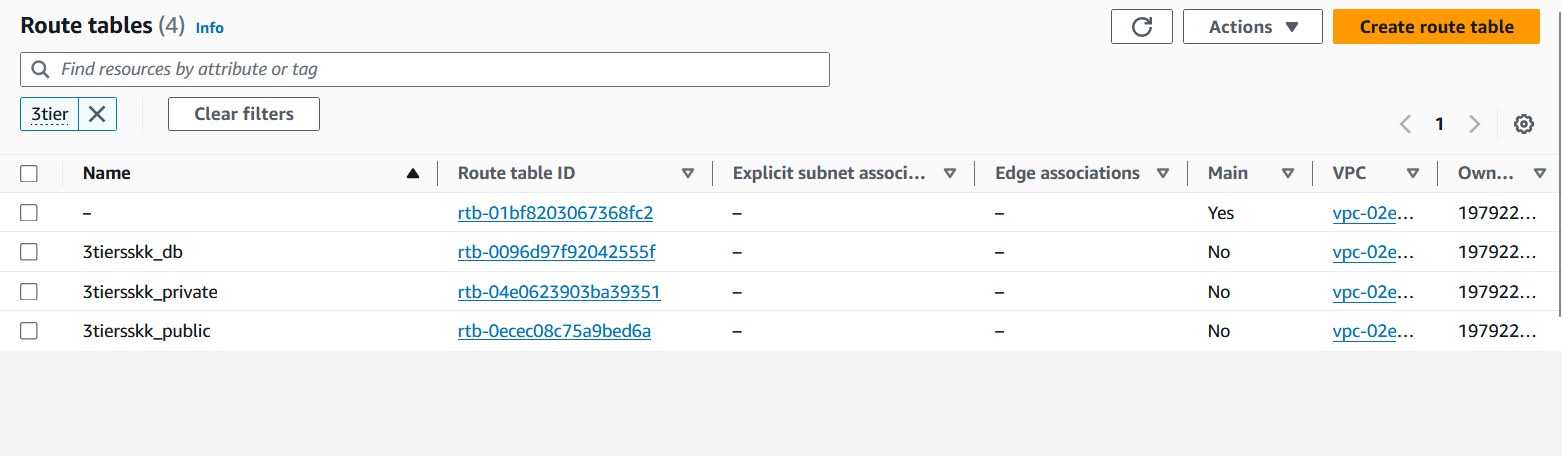
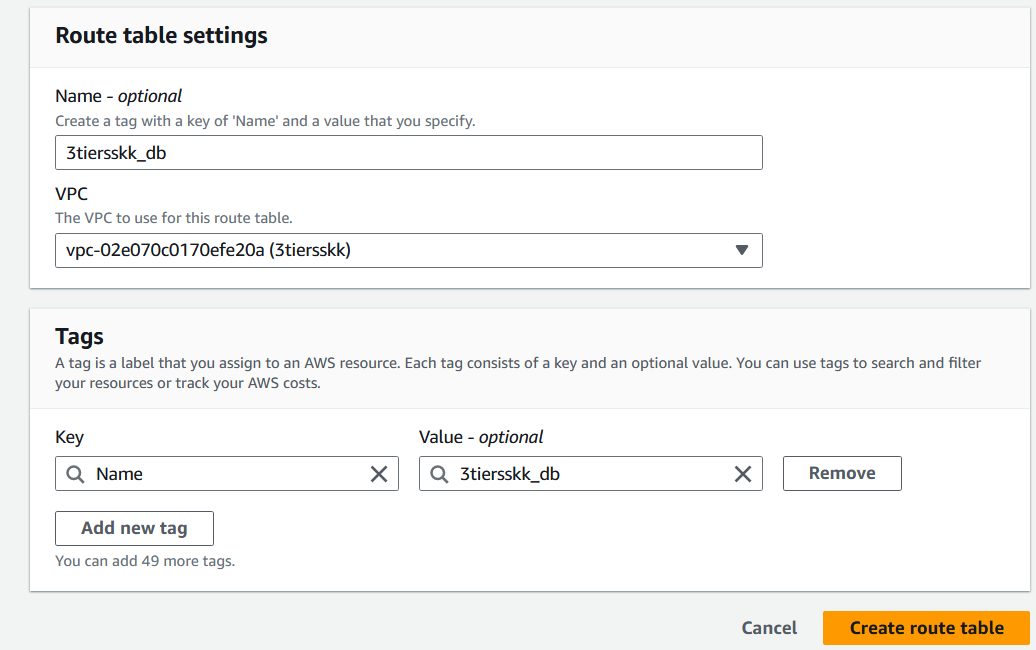
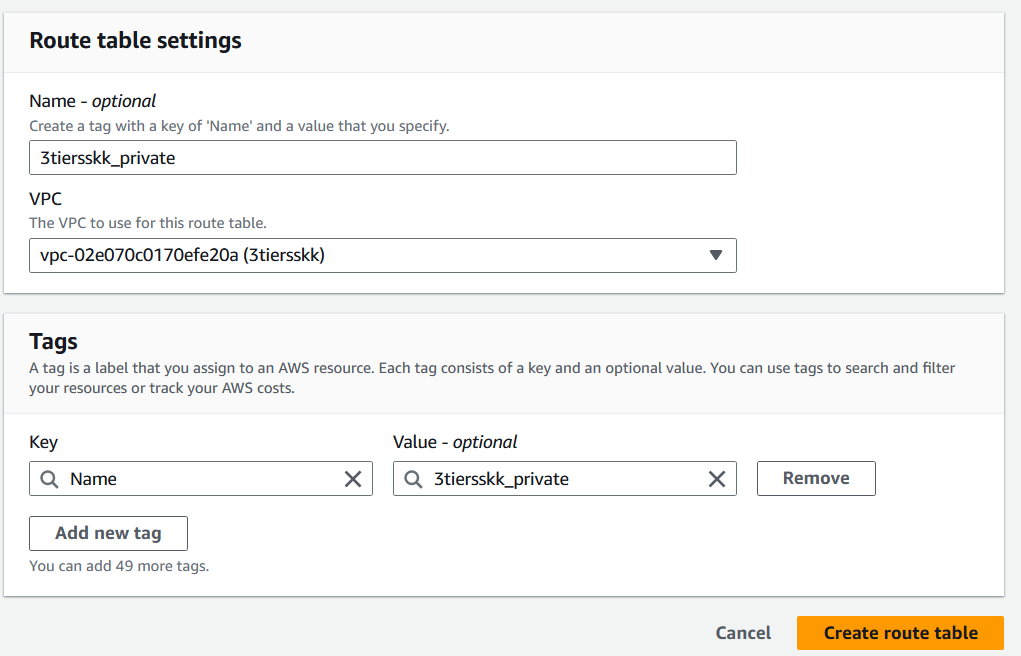
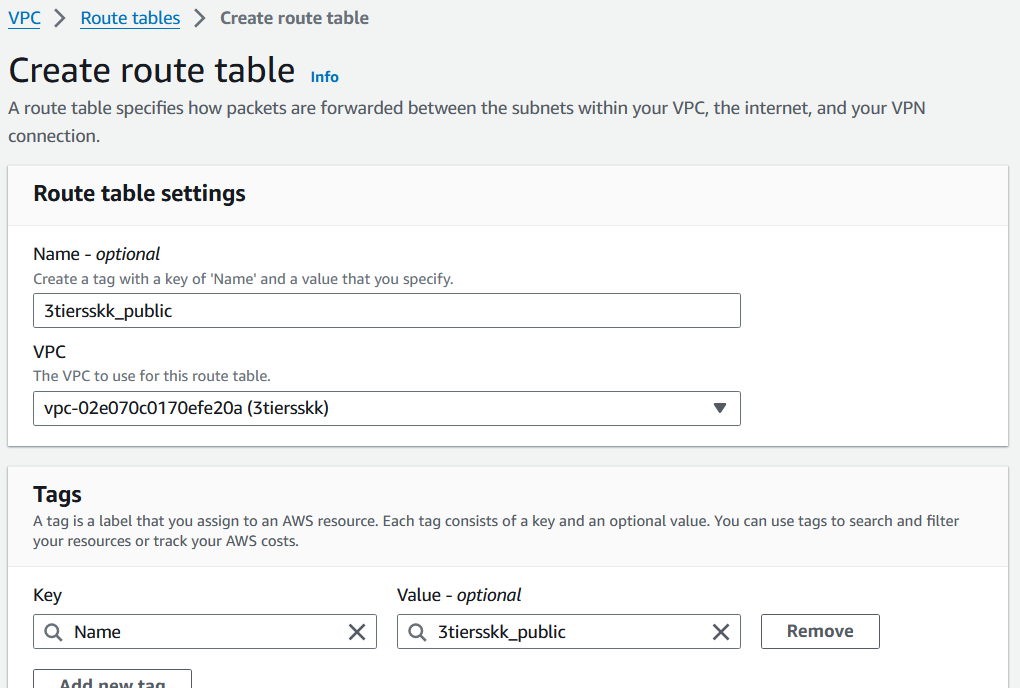




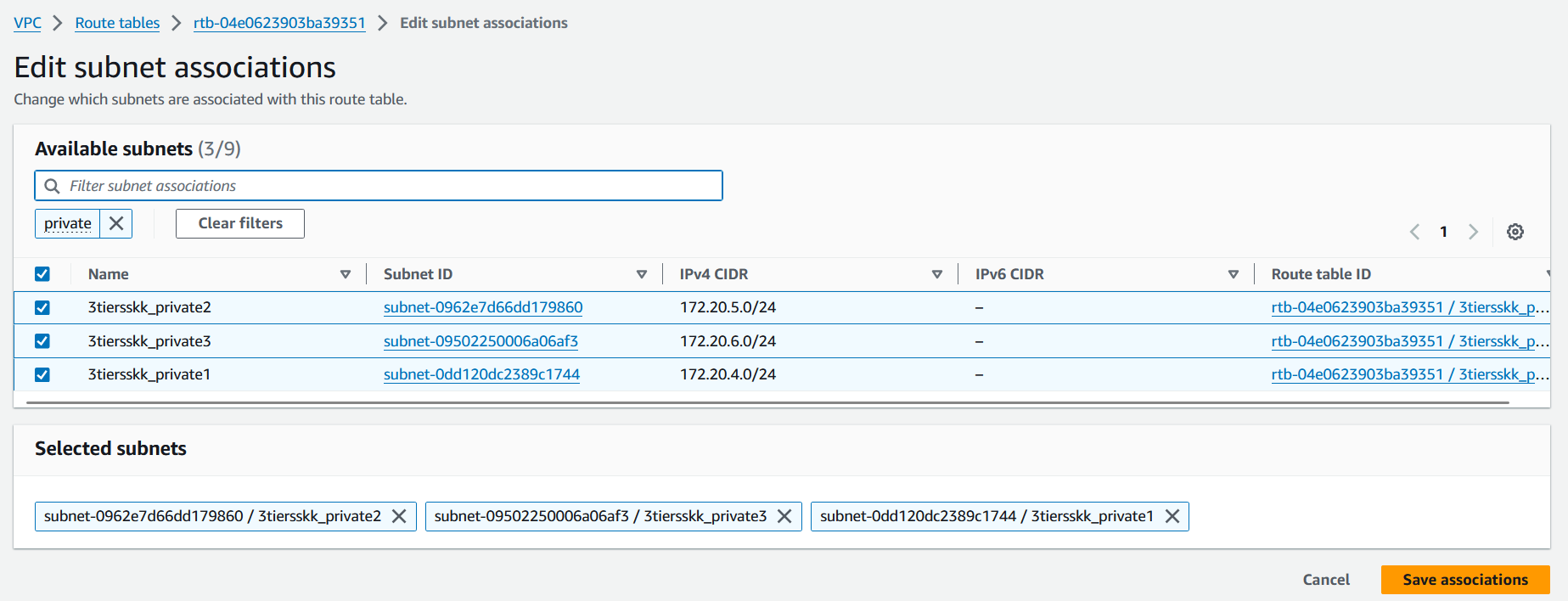
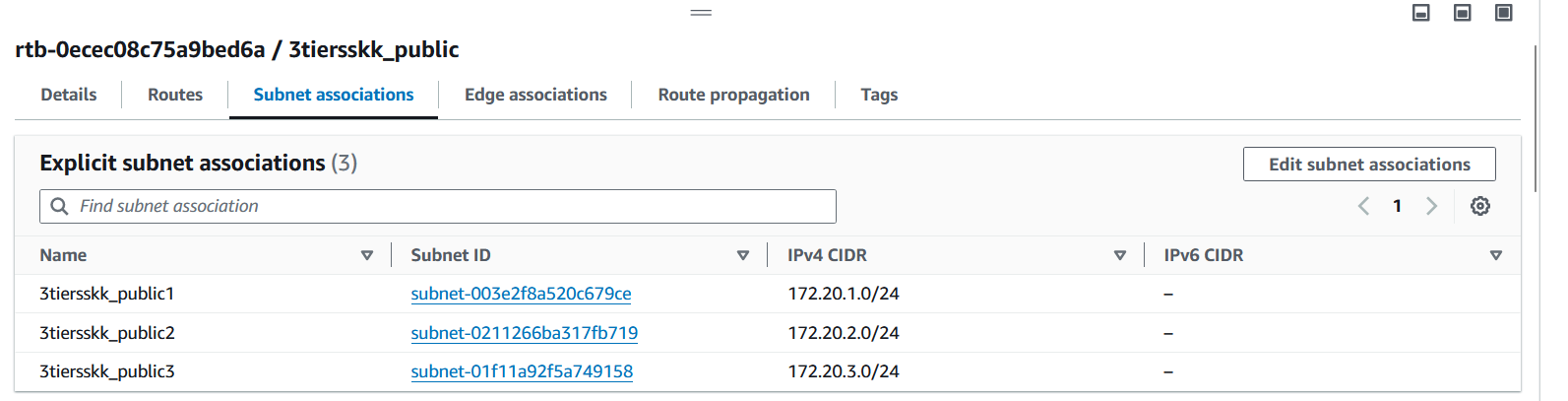
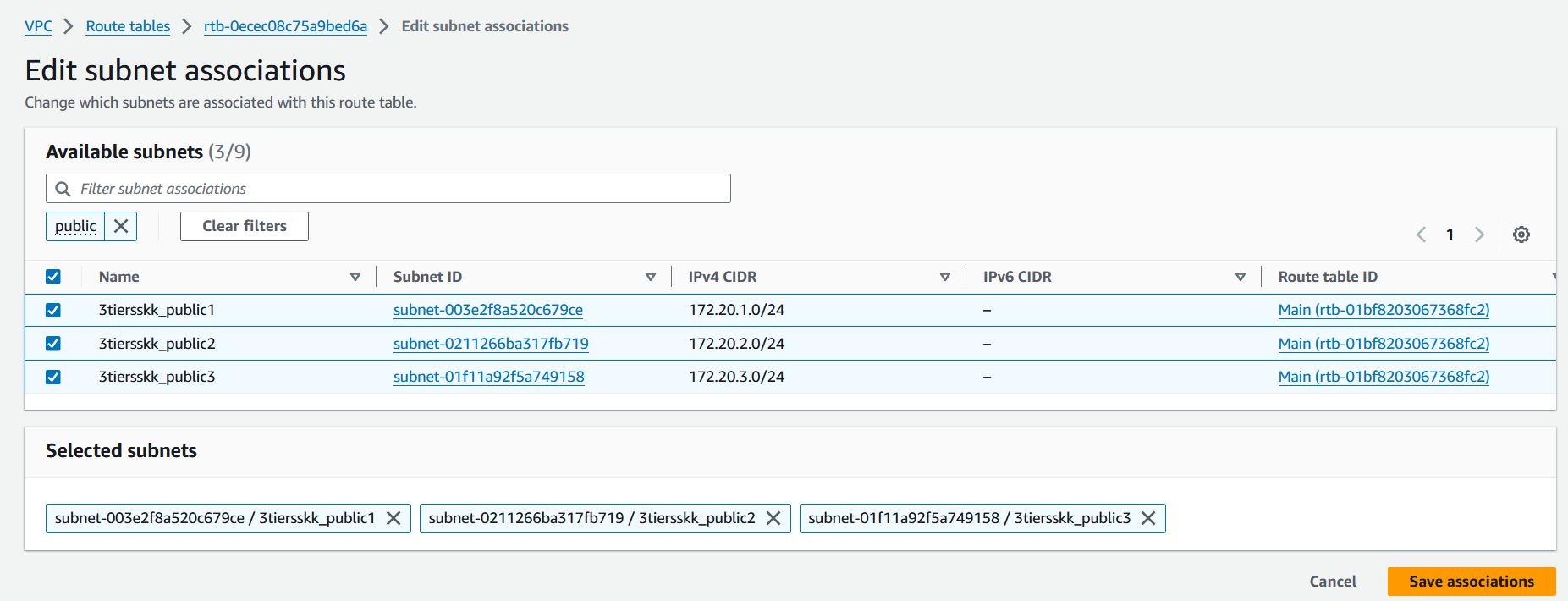


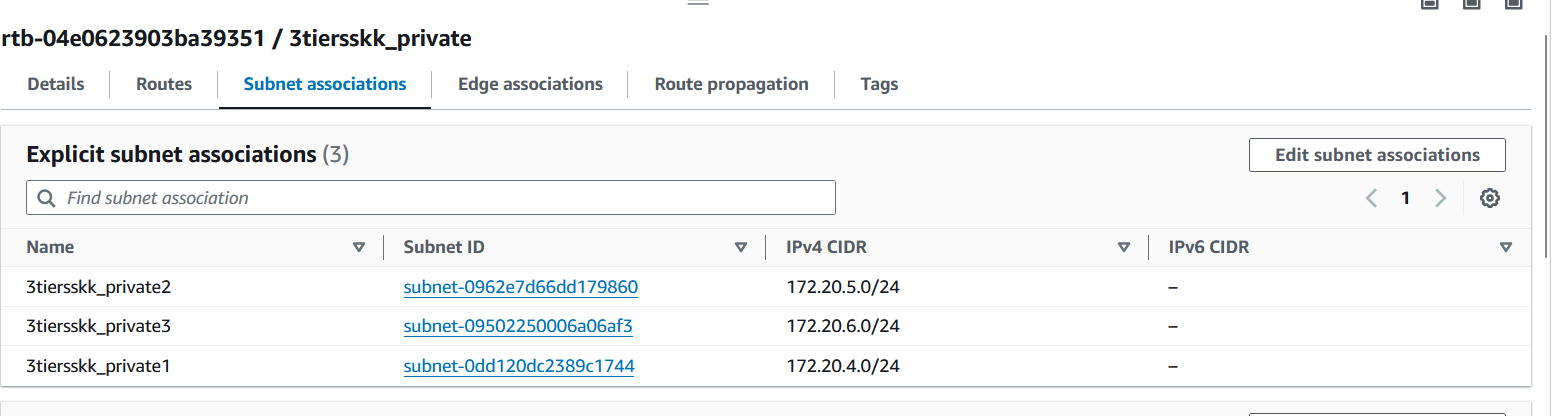


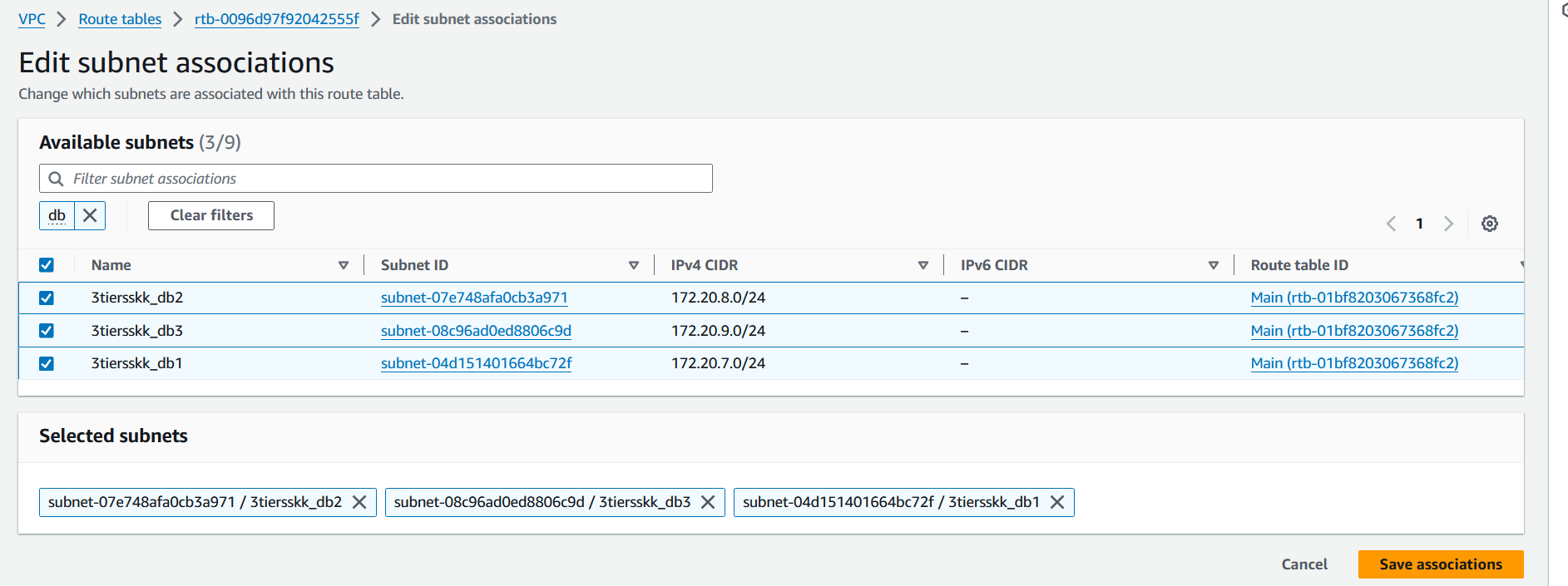
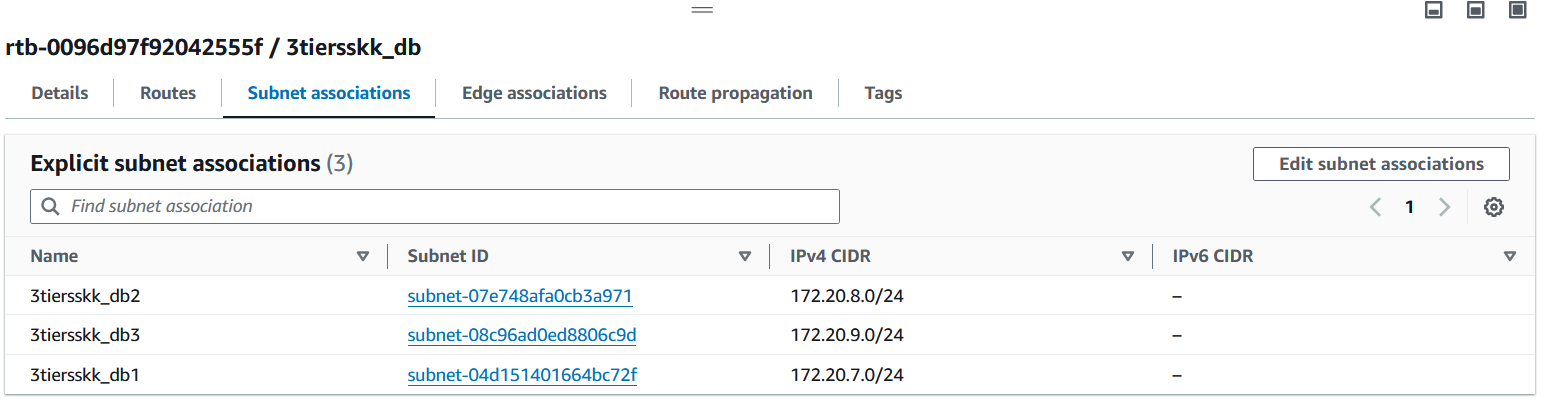
Create route tables



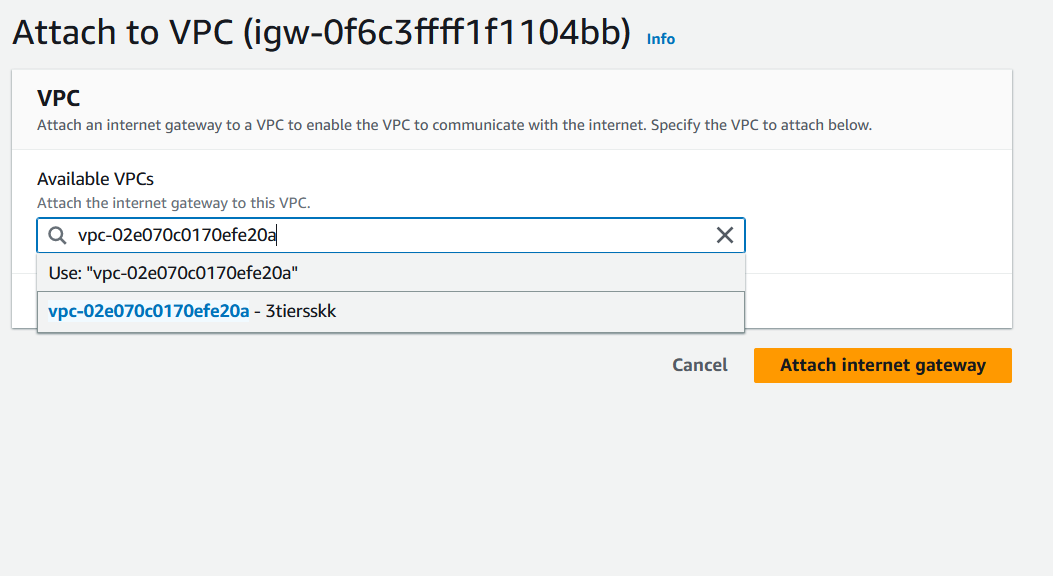
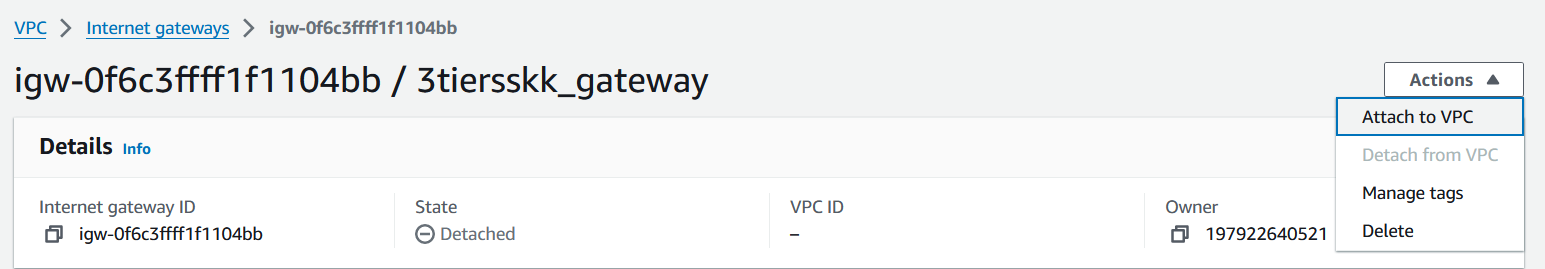
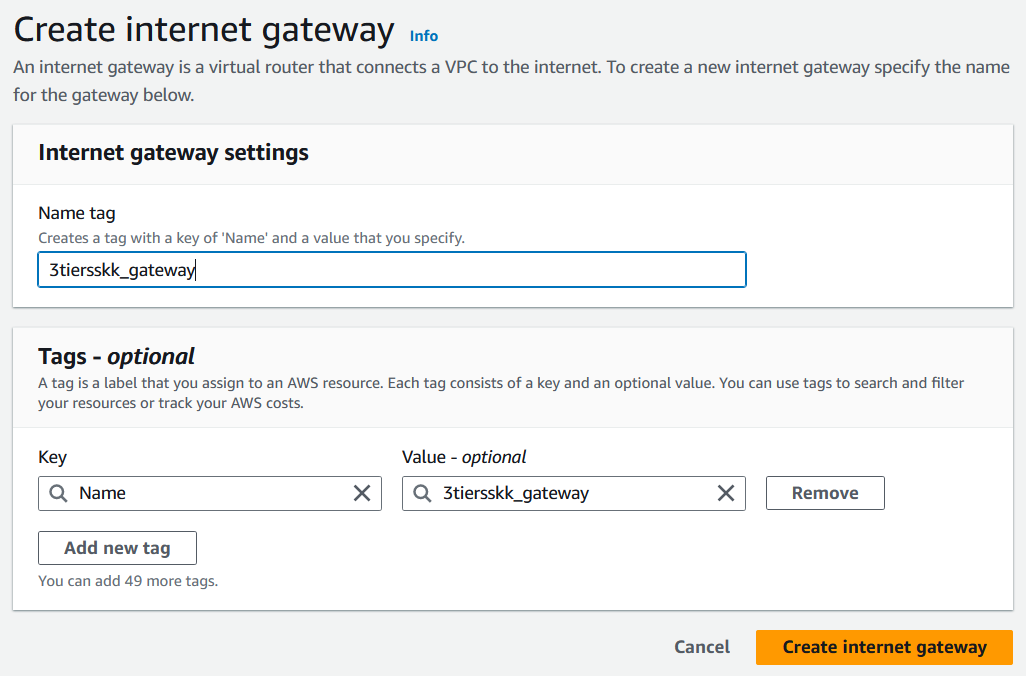
Attach route tables

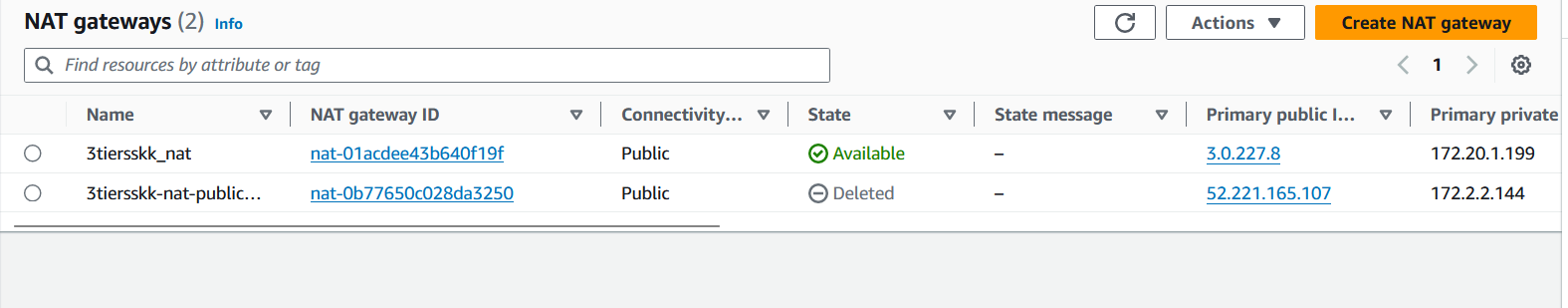
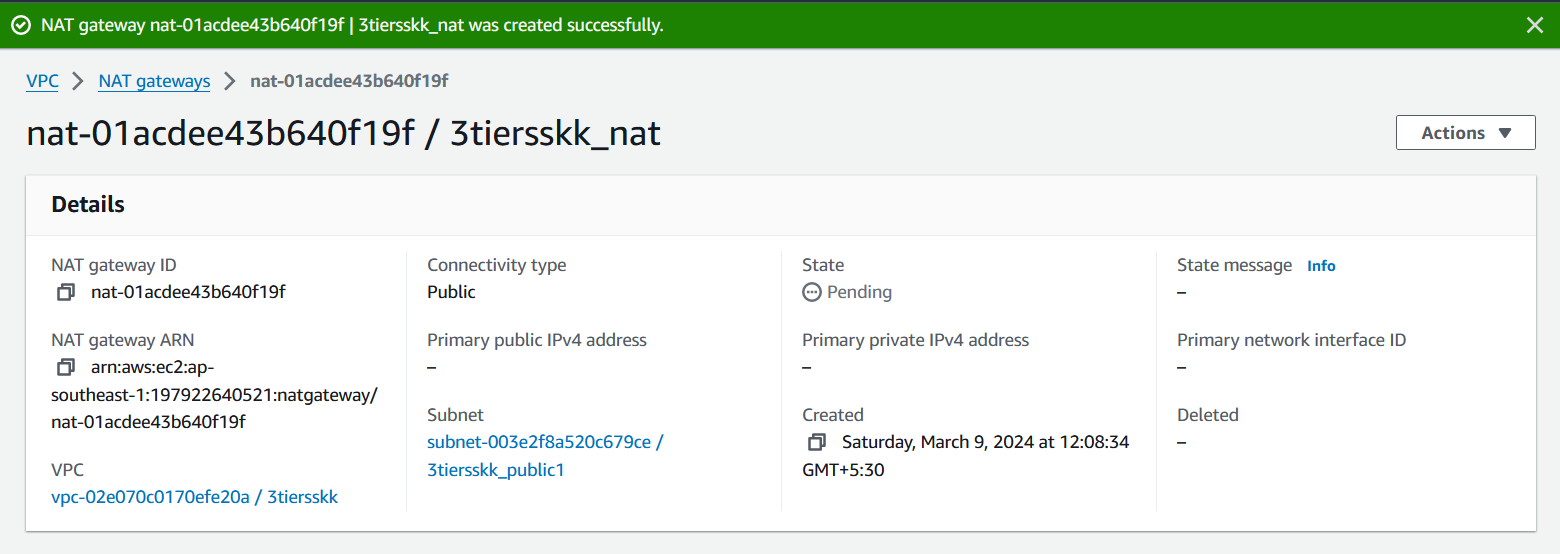
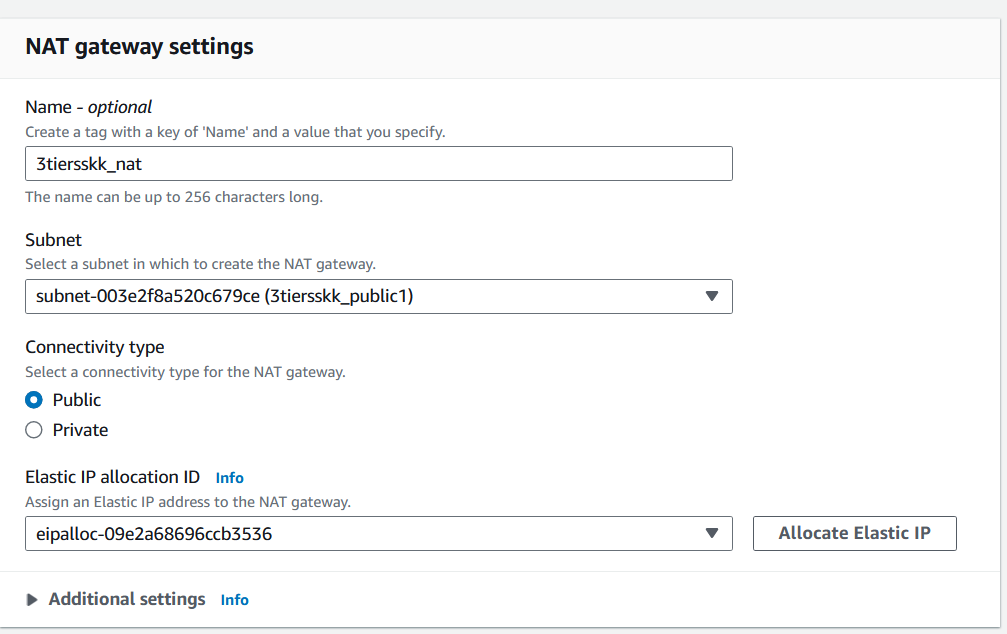




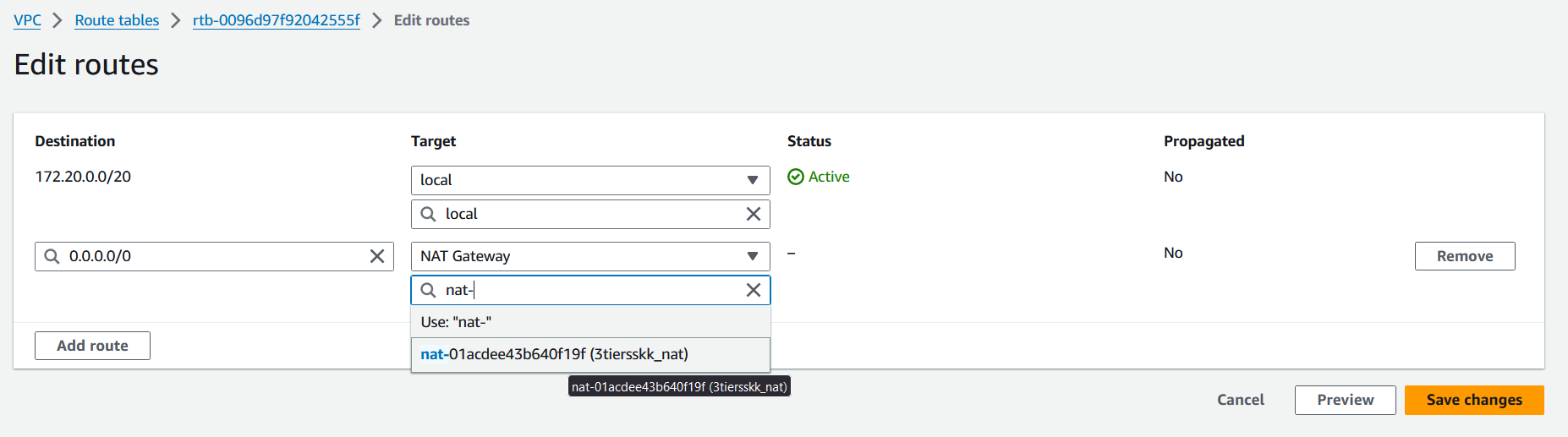
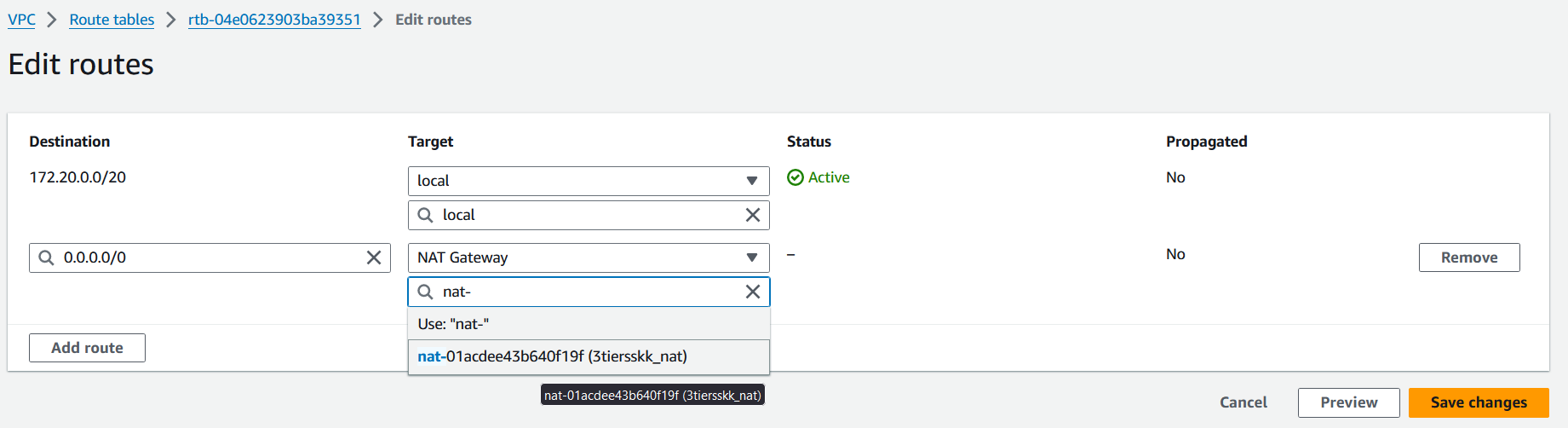


Create gateways

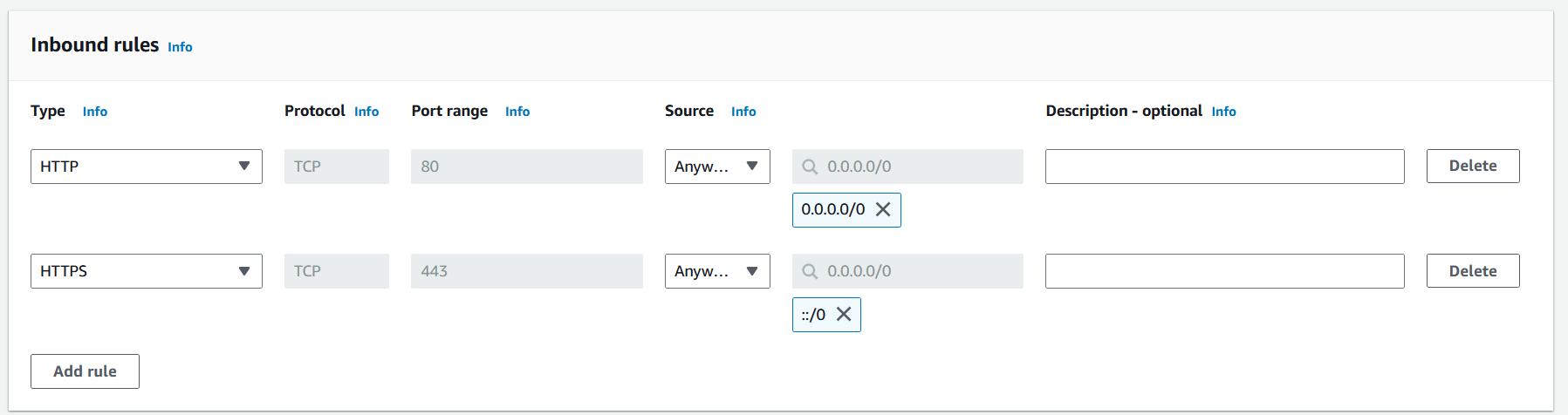
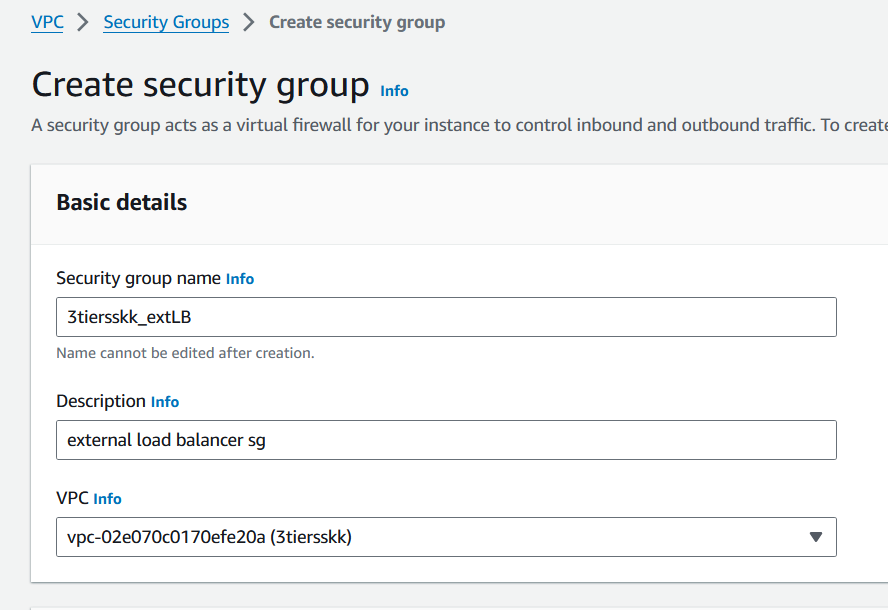


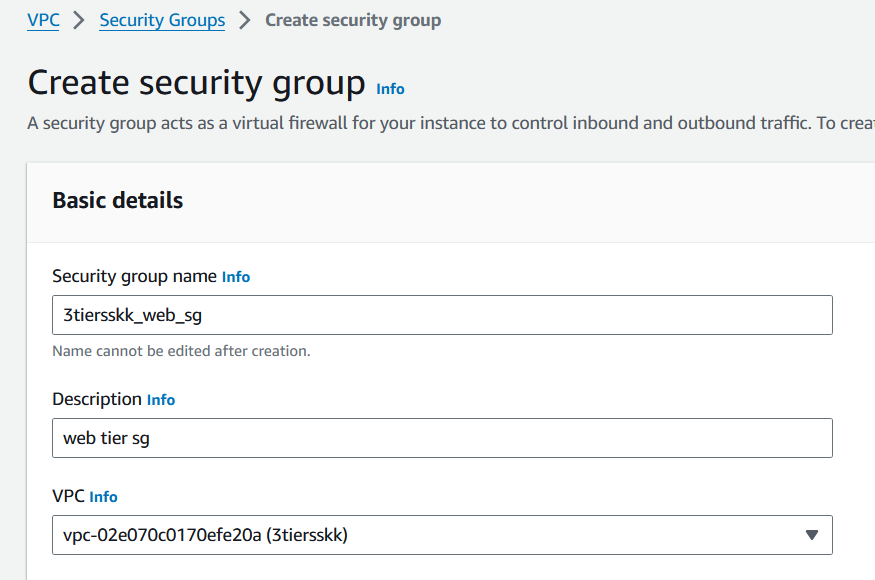


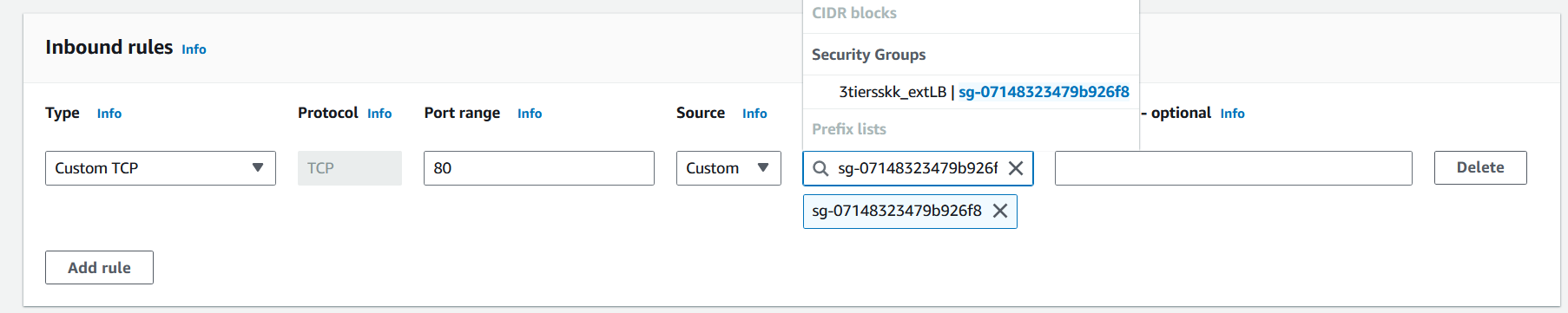
Edit route tables

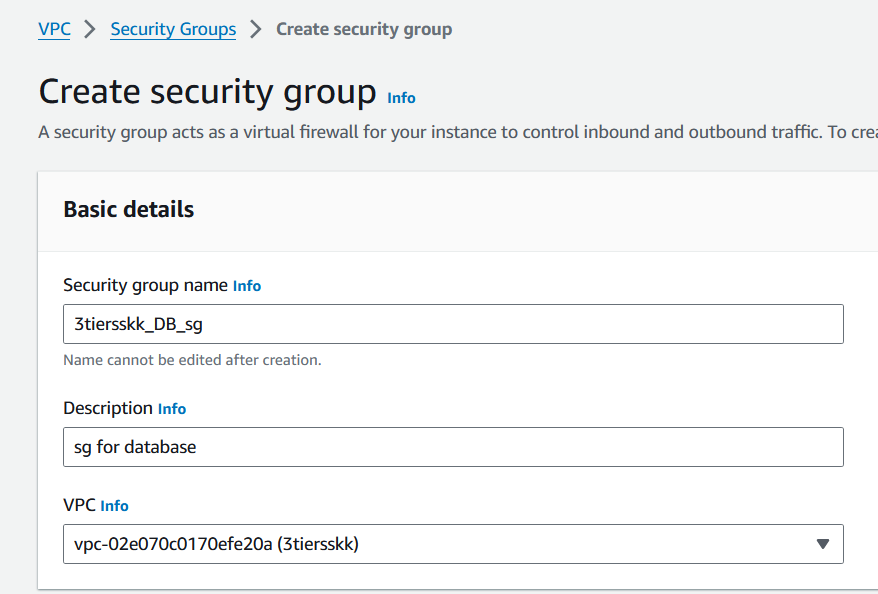
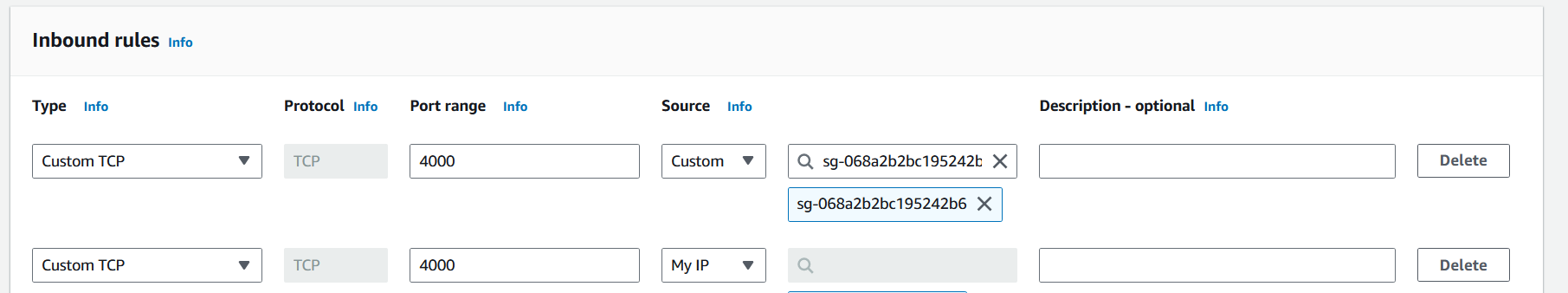
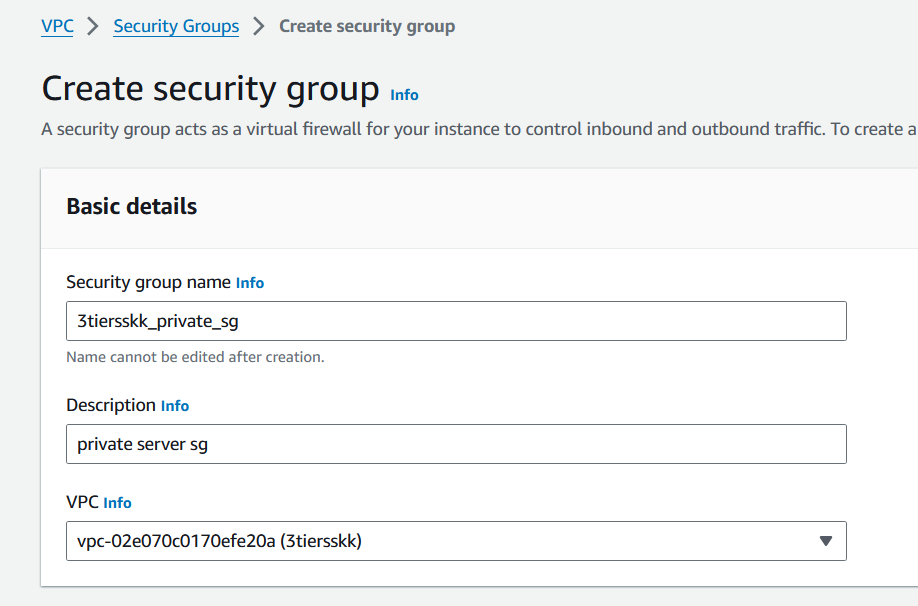
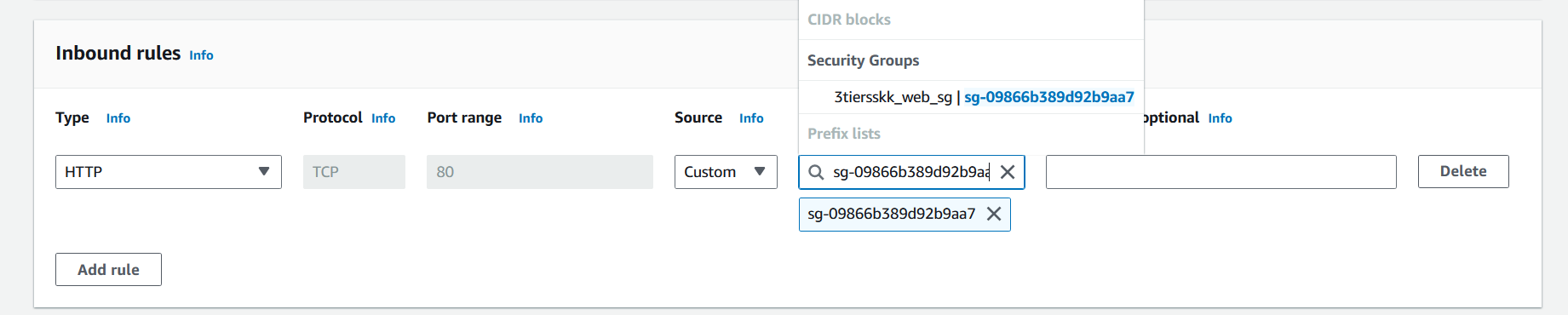


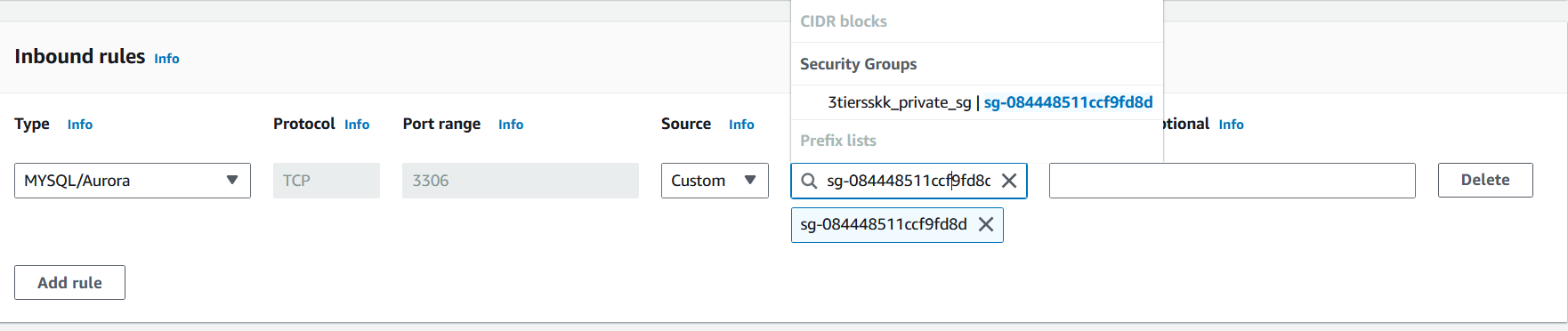
Create security groups



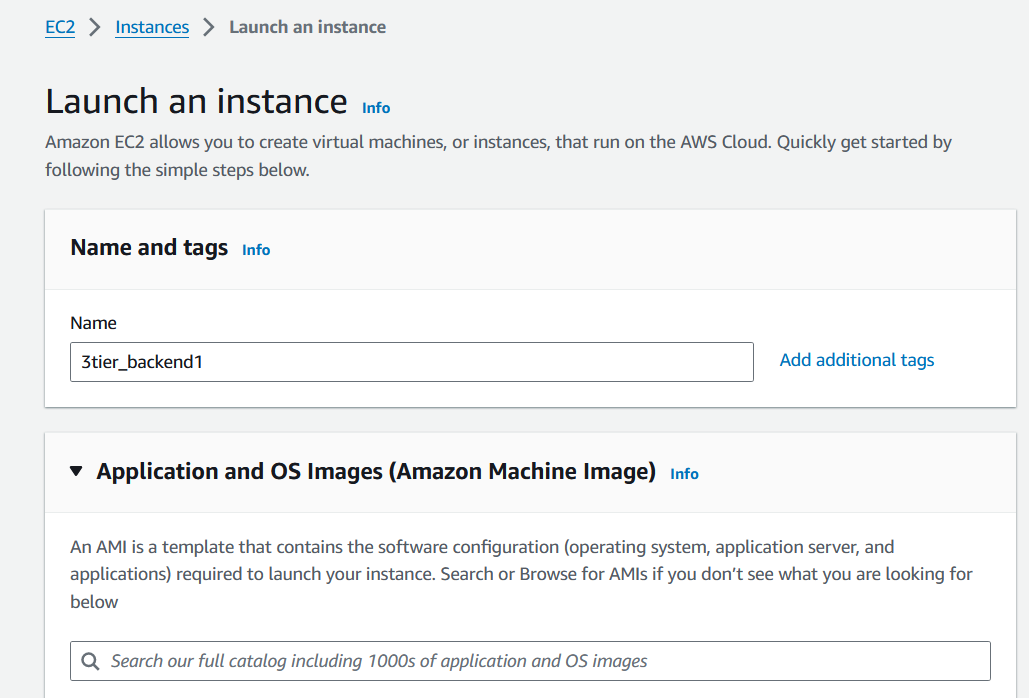
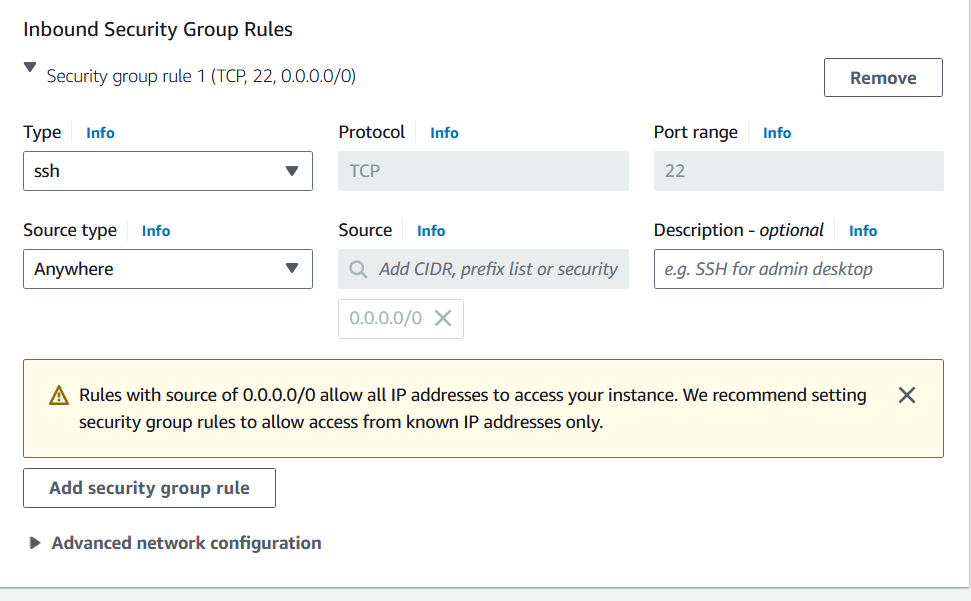
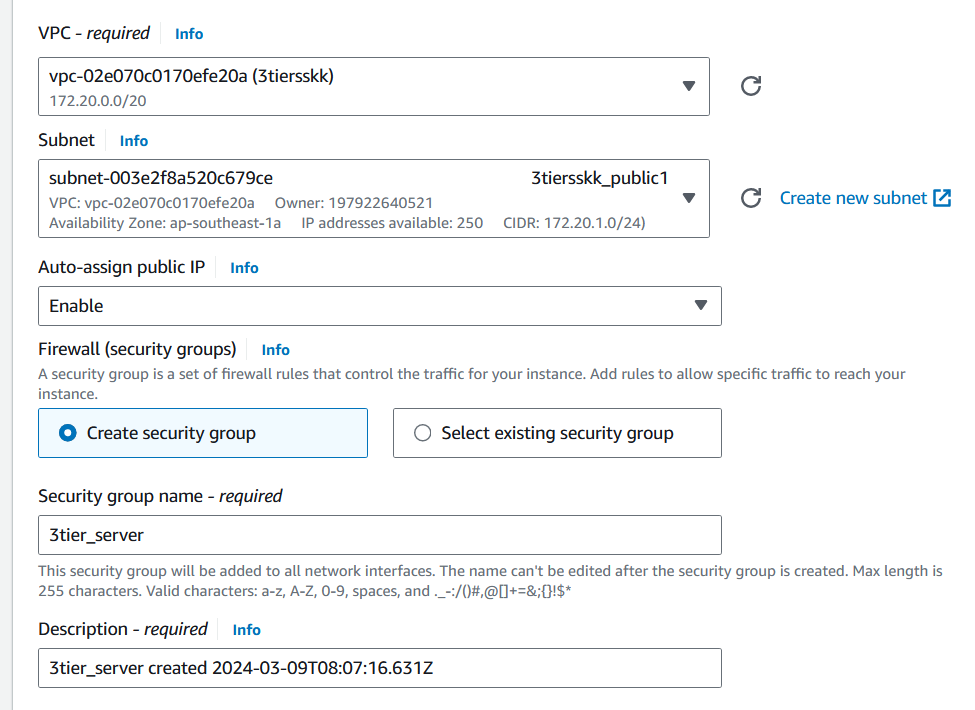
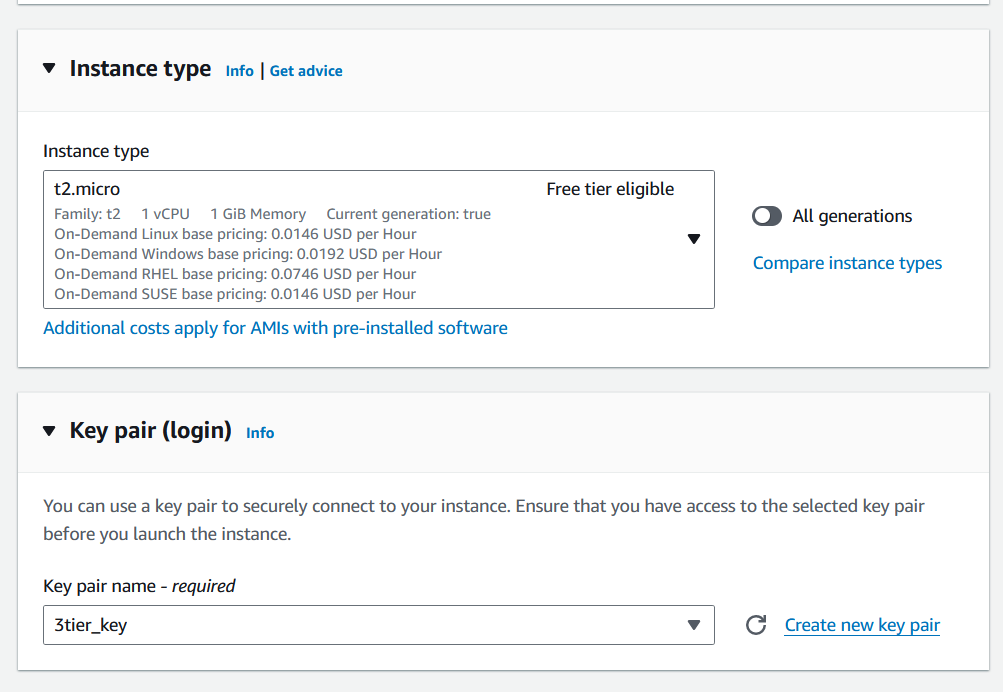
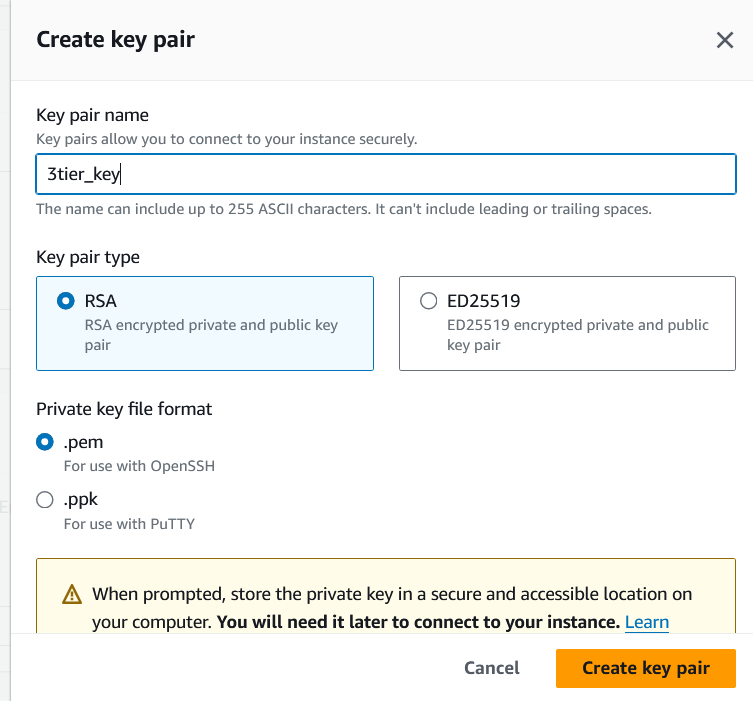
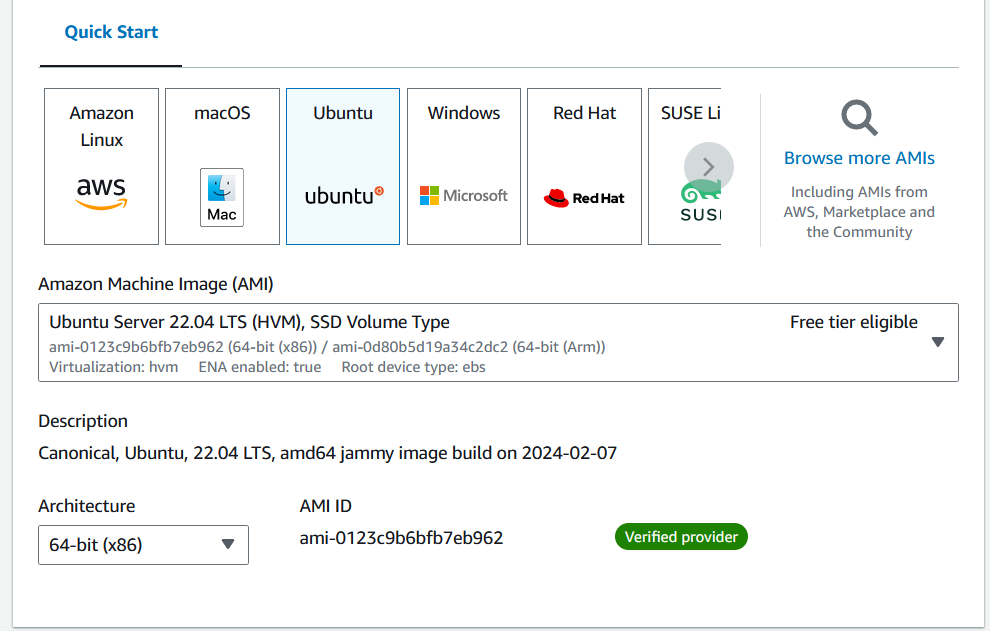
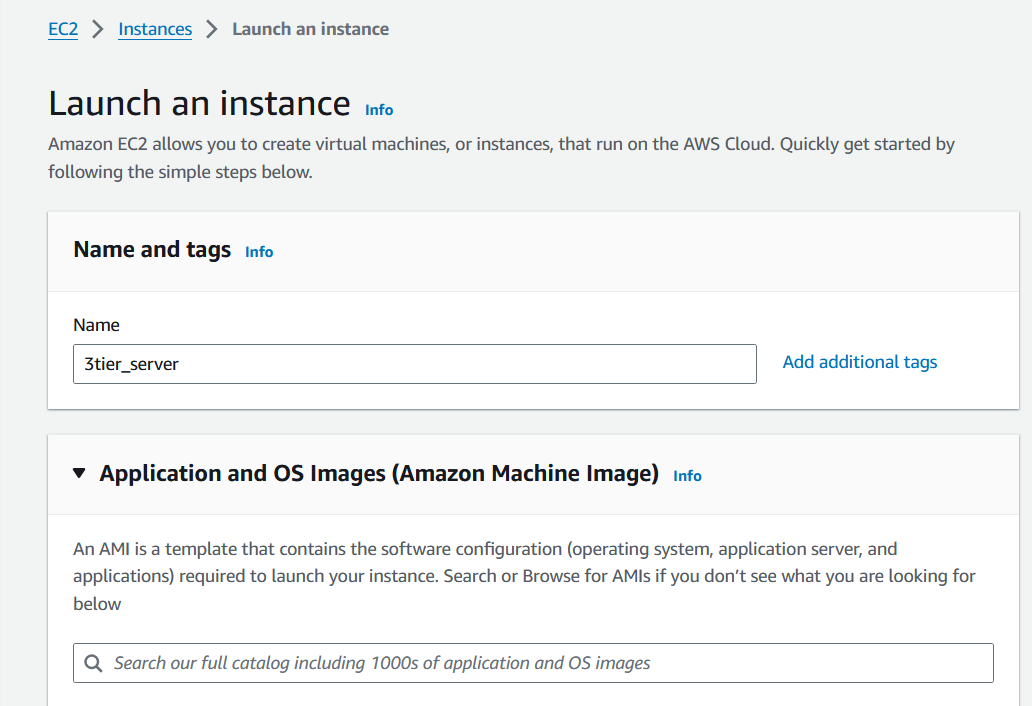


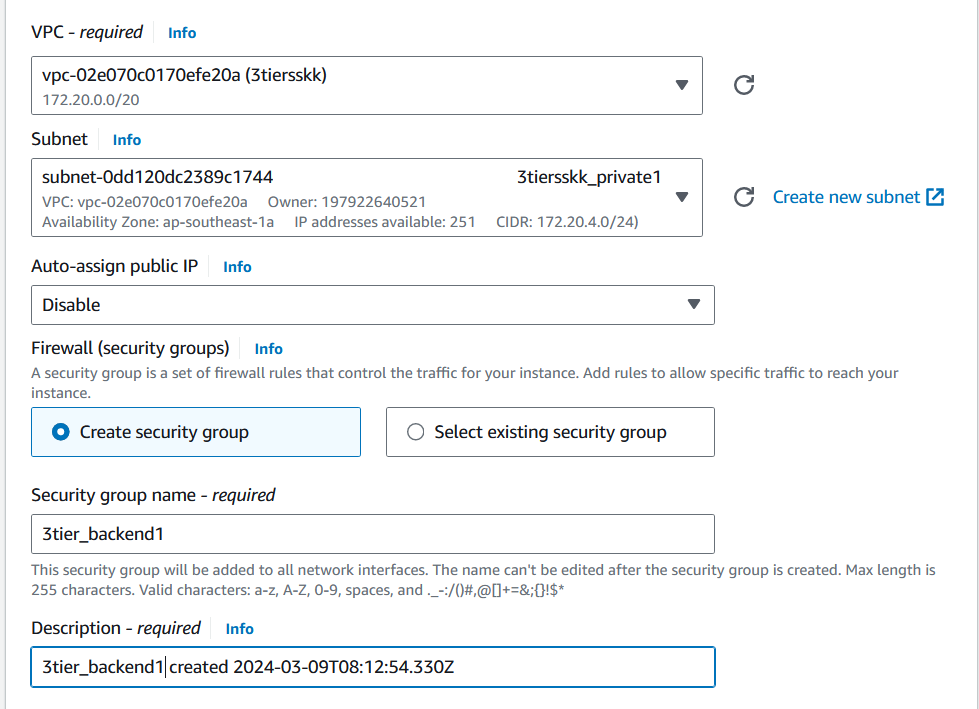


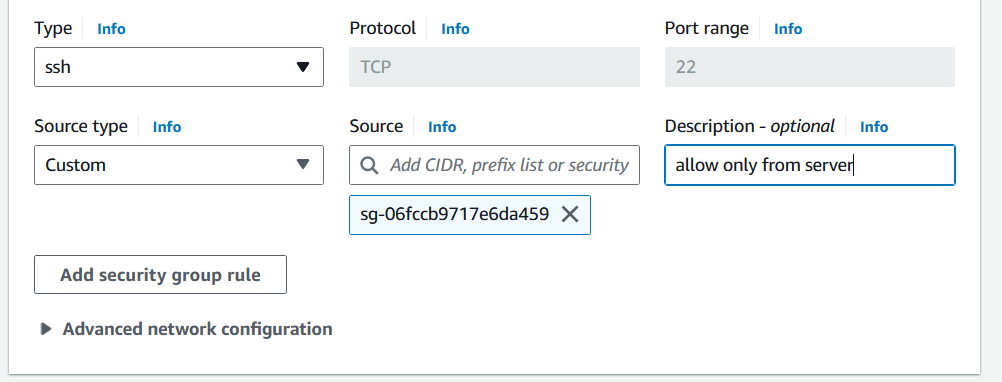


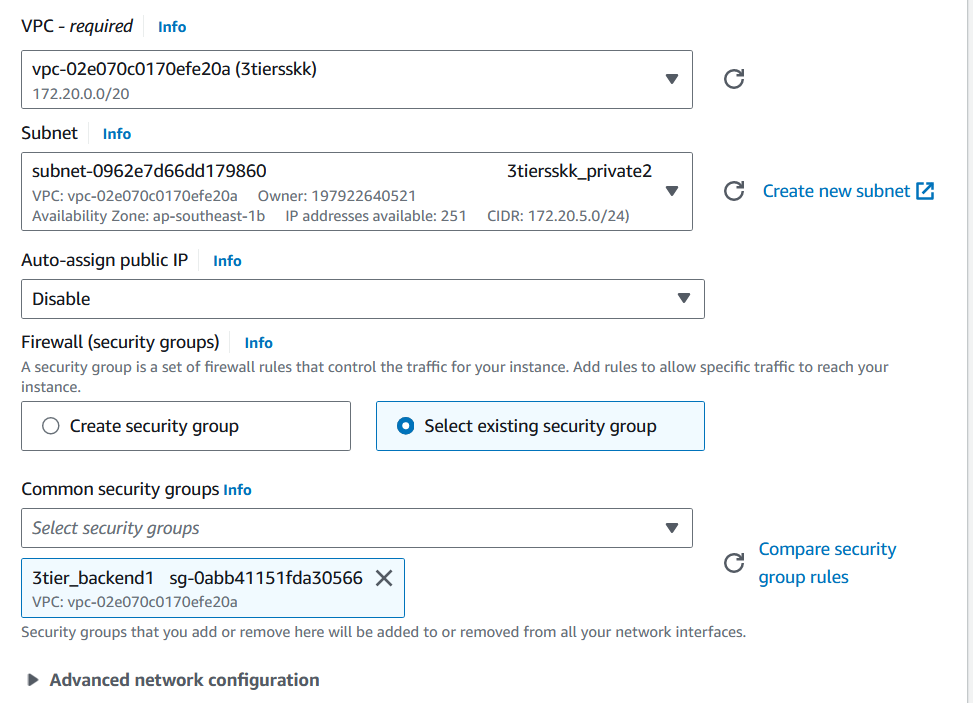
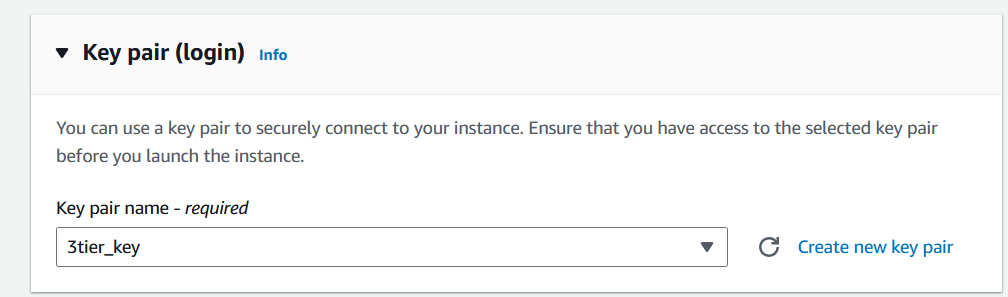
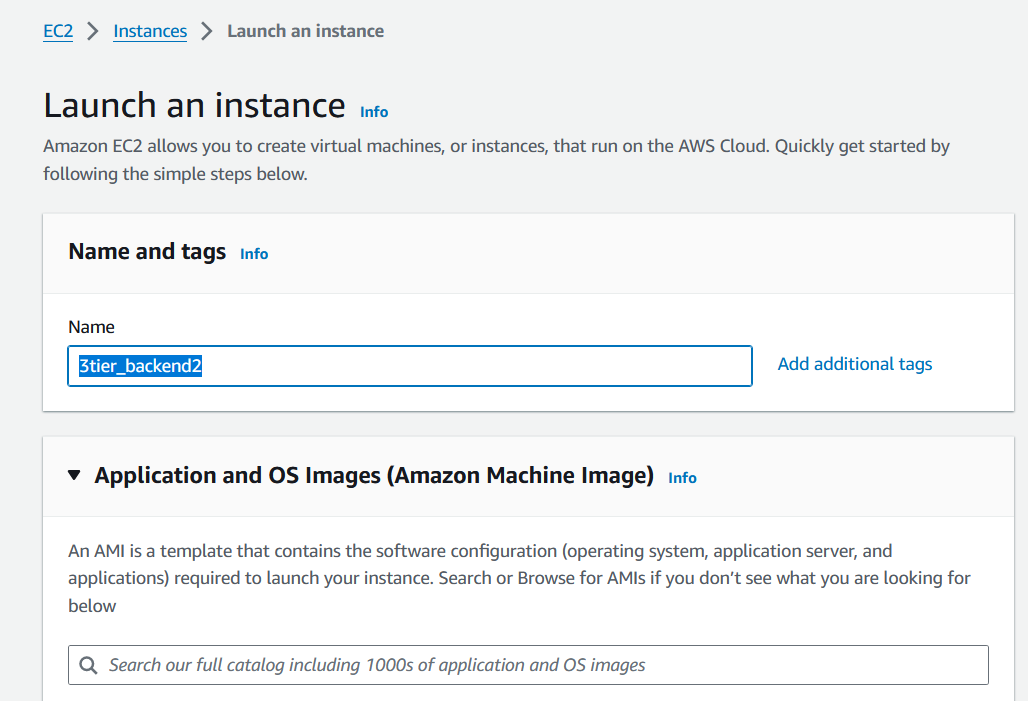


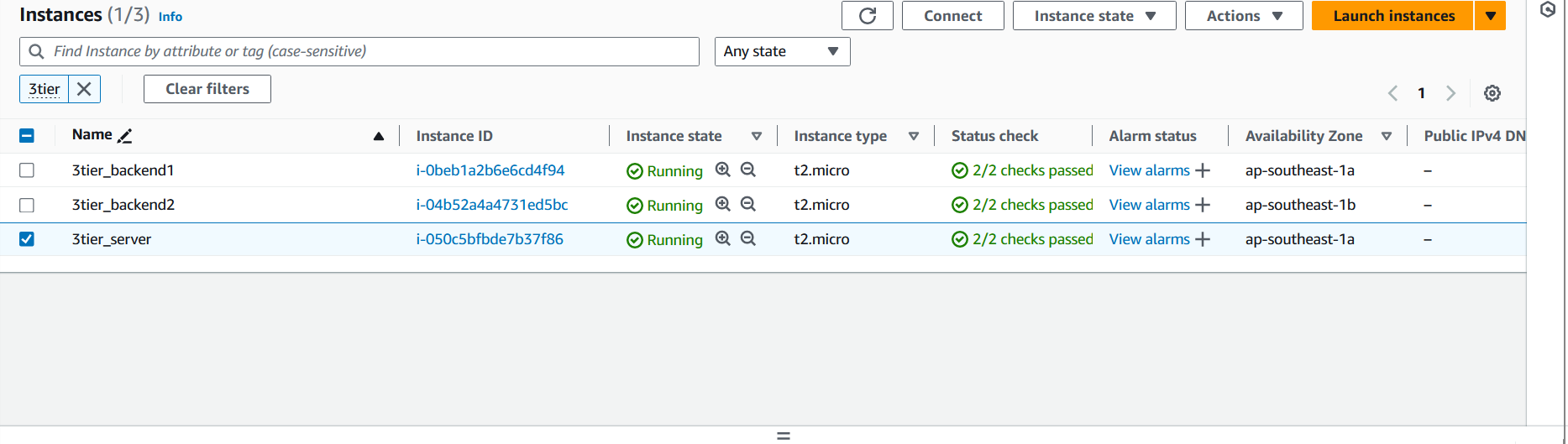
Create instances for presentation tier (frontend) and application tier(backend)

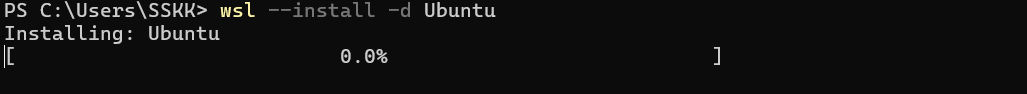


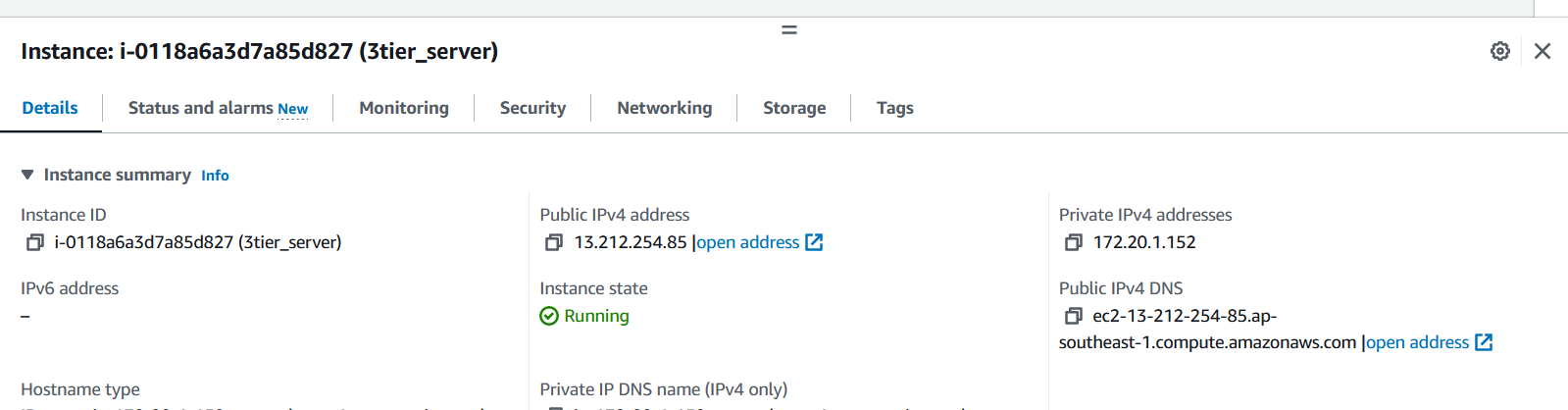


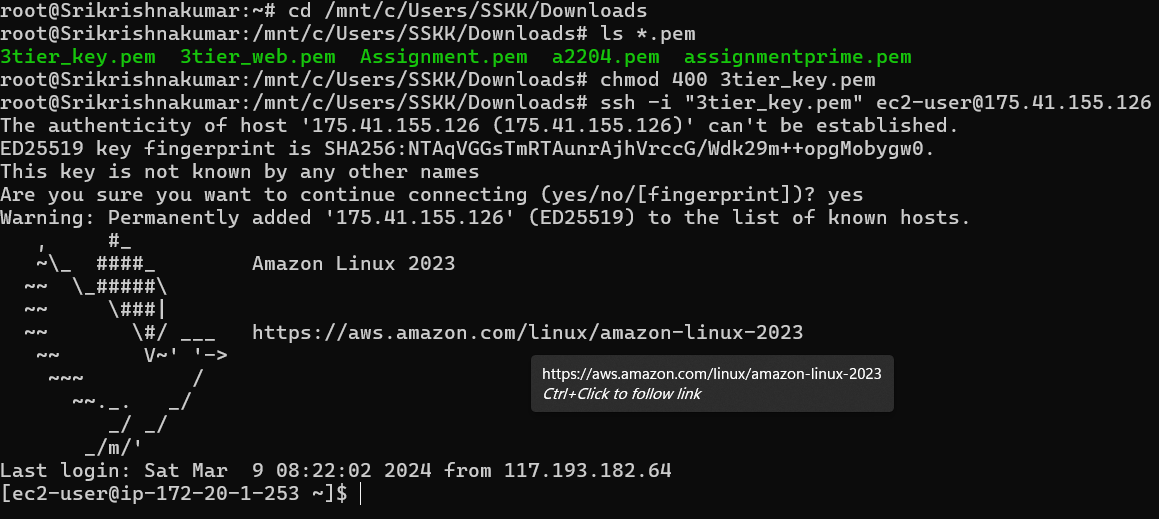
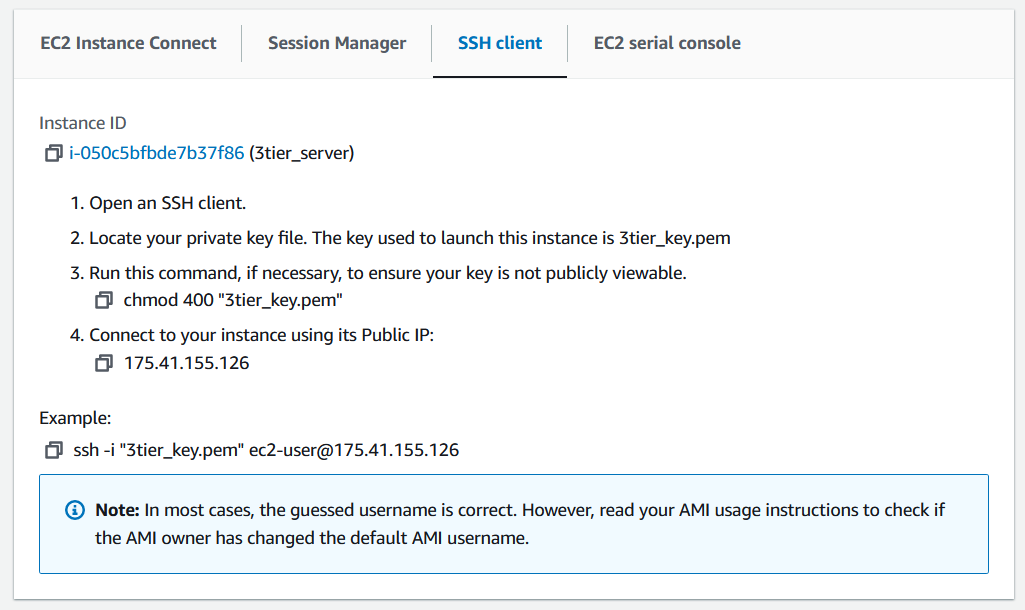
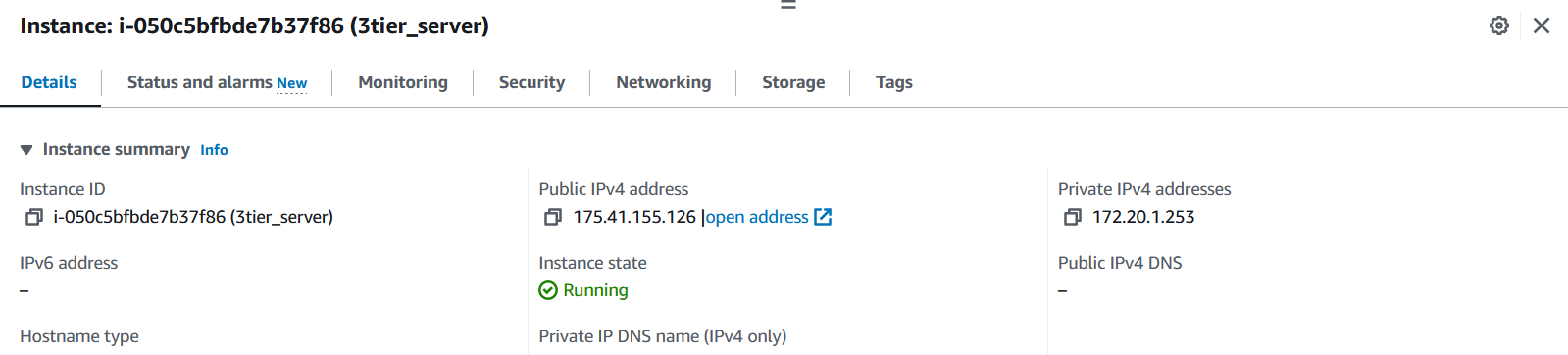


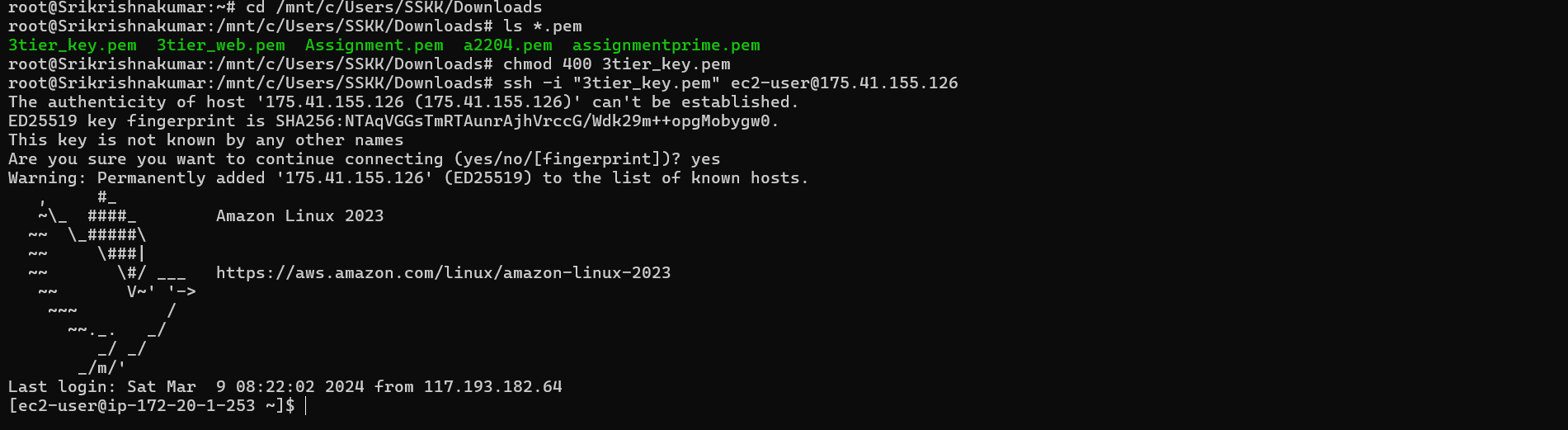


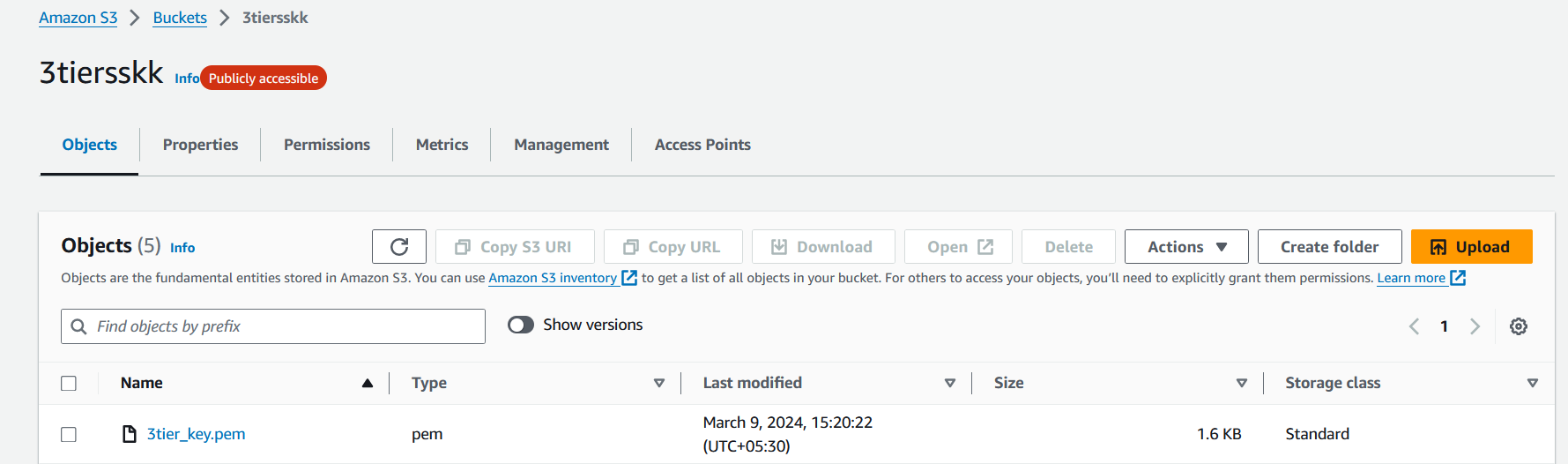


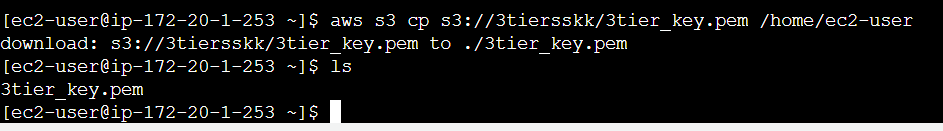


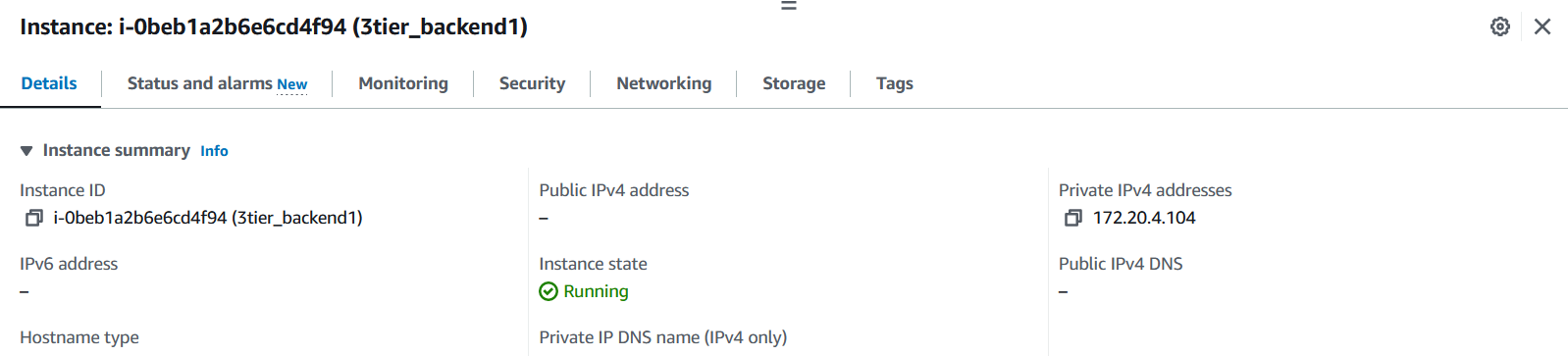


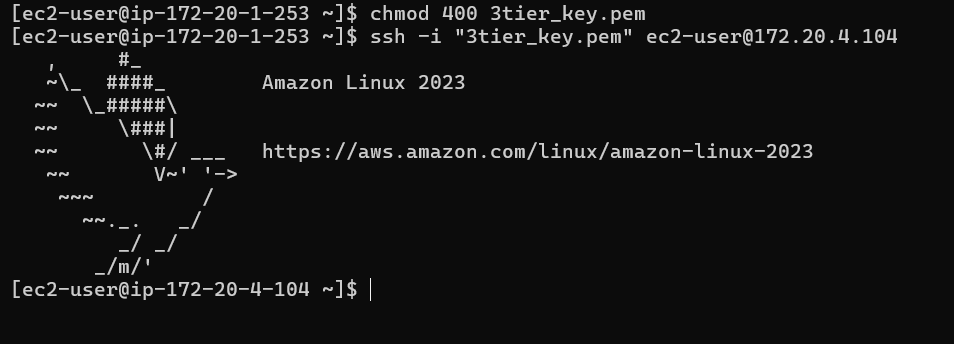
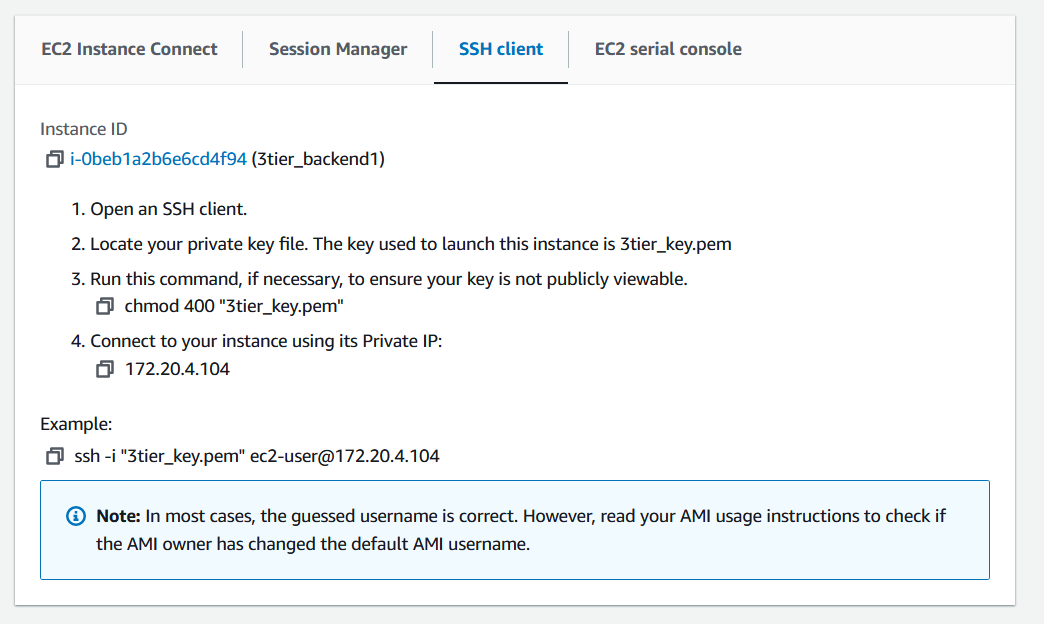


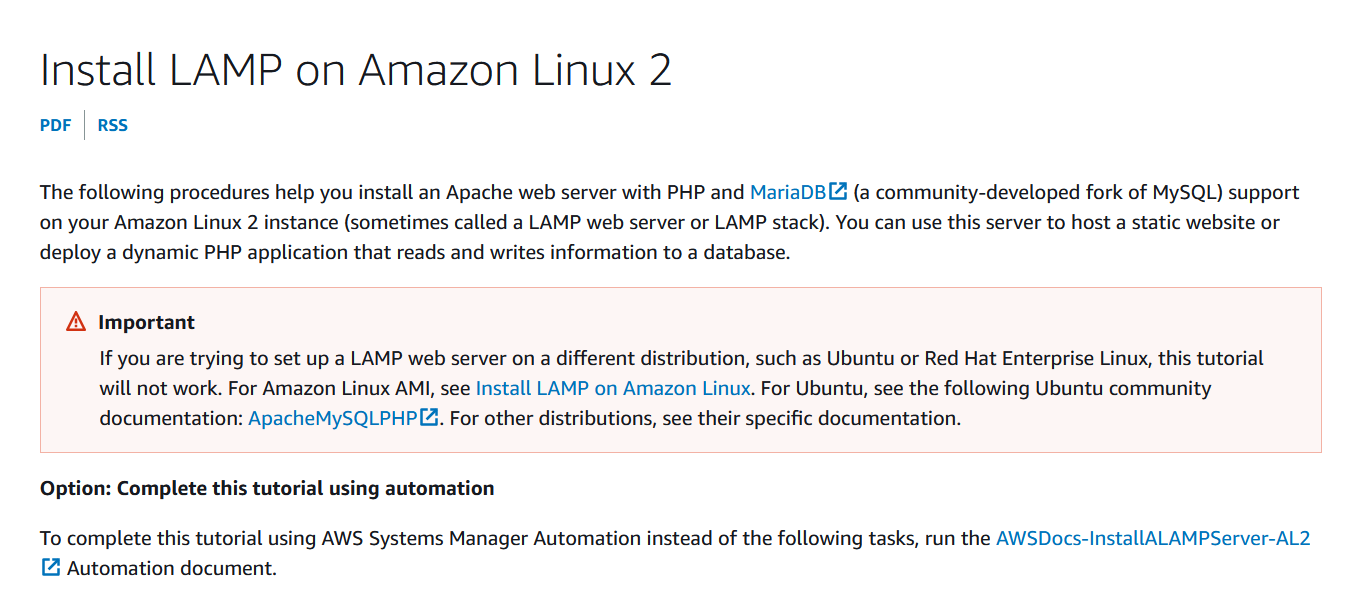




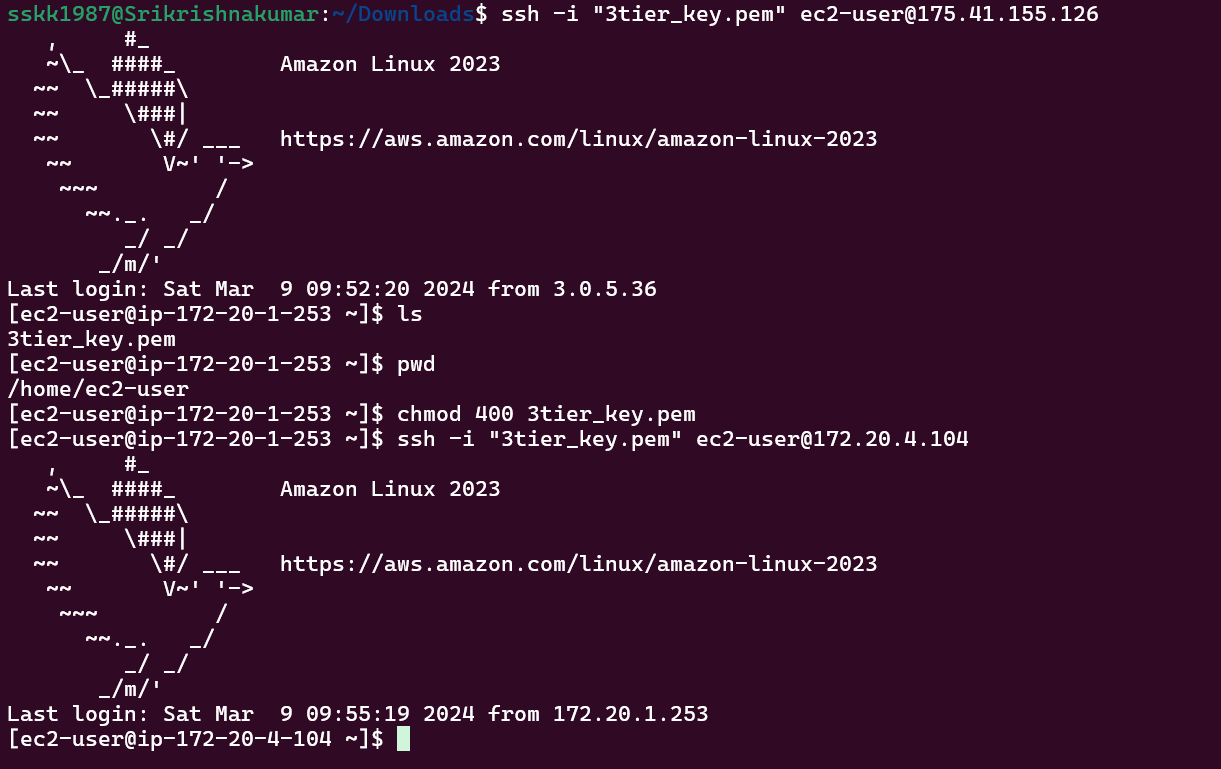






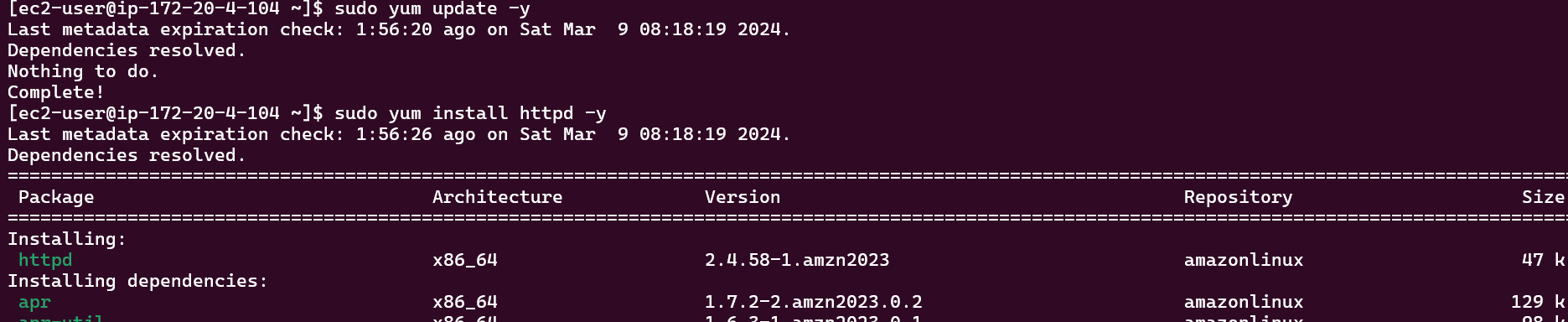


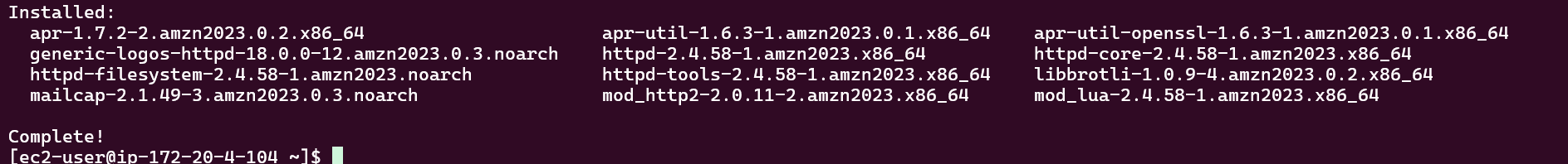




**Update Package Repository**

### Install Apache Web Server





installation, start the Apache service and enable it to start on boot:



###### To set file permissions

1. Add your user (in this case, ec2-user) to the apache group.

 [ec2-user ~]$ sudo usermod -a -G apache ec2-user

 Log out and then log back in again to pick up the new group, and then verify your membership.

1. Log out (use the **exit** command or close the terminal window):

 [ec2-user ~]$ exit

 To verify your membership in the apache group, reconnect to your instance, and then run the following command:

1. 
2. [ec2-user ~]$ groups

ec2-user wheel apache

 Change the group ownership of /var/www and its contents to the apache group.

 [ec2-user ~]$ sudo chown -R ec2-user:apache /var/www

 To add group write permissions and to set the group ID on future subdirectories, change the directory permissions of /var/www and its subdirectories.

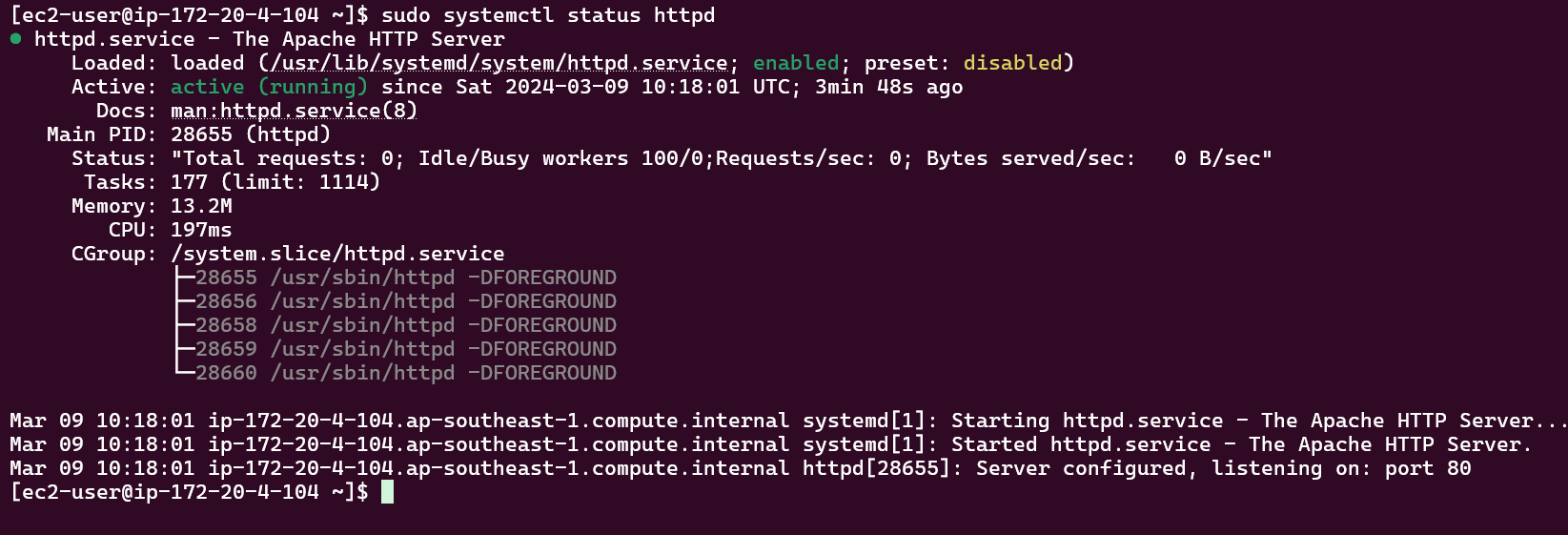
 [ec2-user ~]$ sudo chmod 2775 /var/www

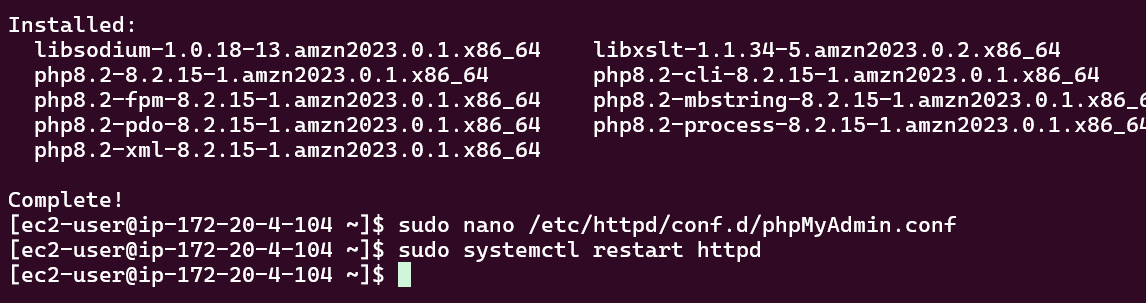
[ec2-user ~]$ find /var/www -type d -exec sudo chmod 2775 {} \;

 To add group write permissions, recursively change the file permissions of /var/www and its subdirectories:

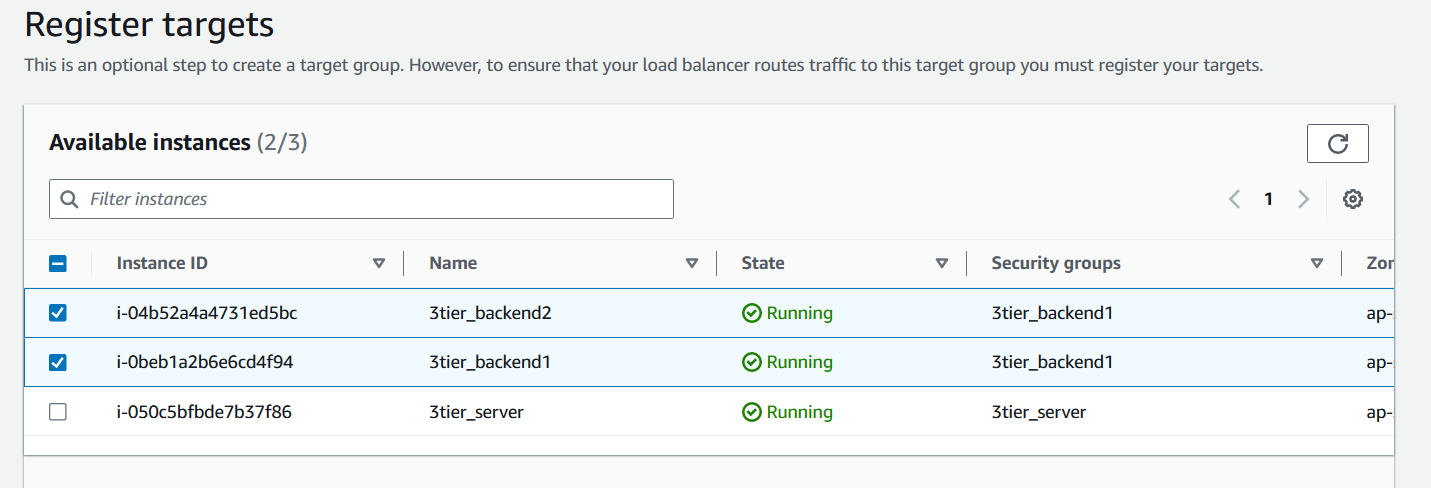
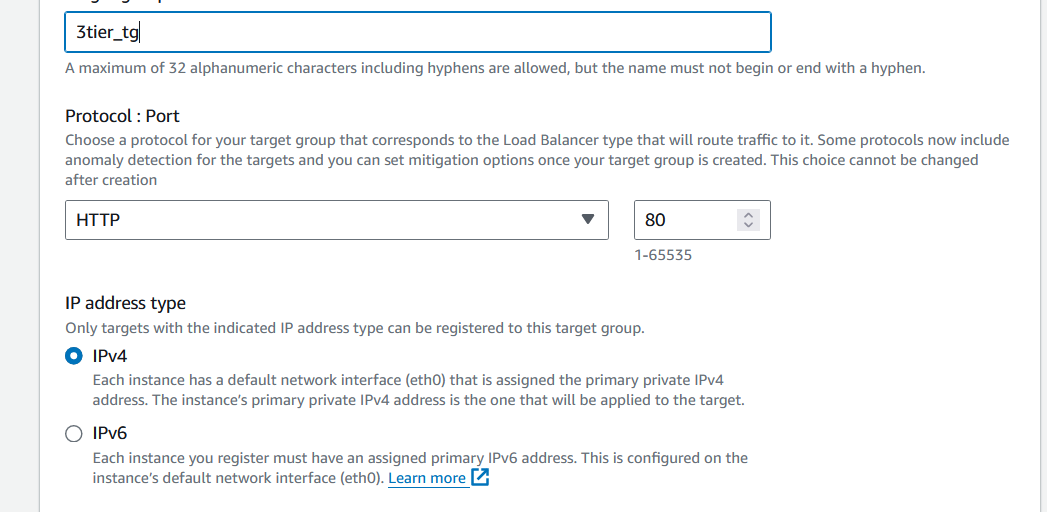
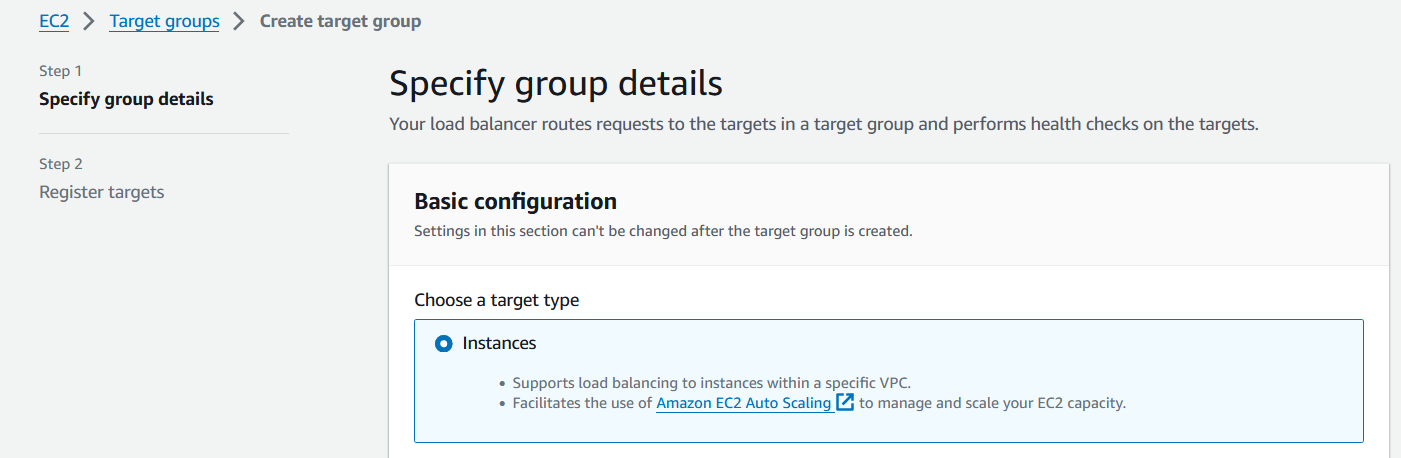
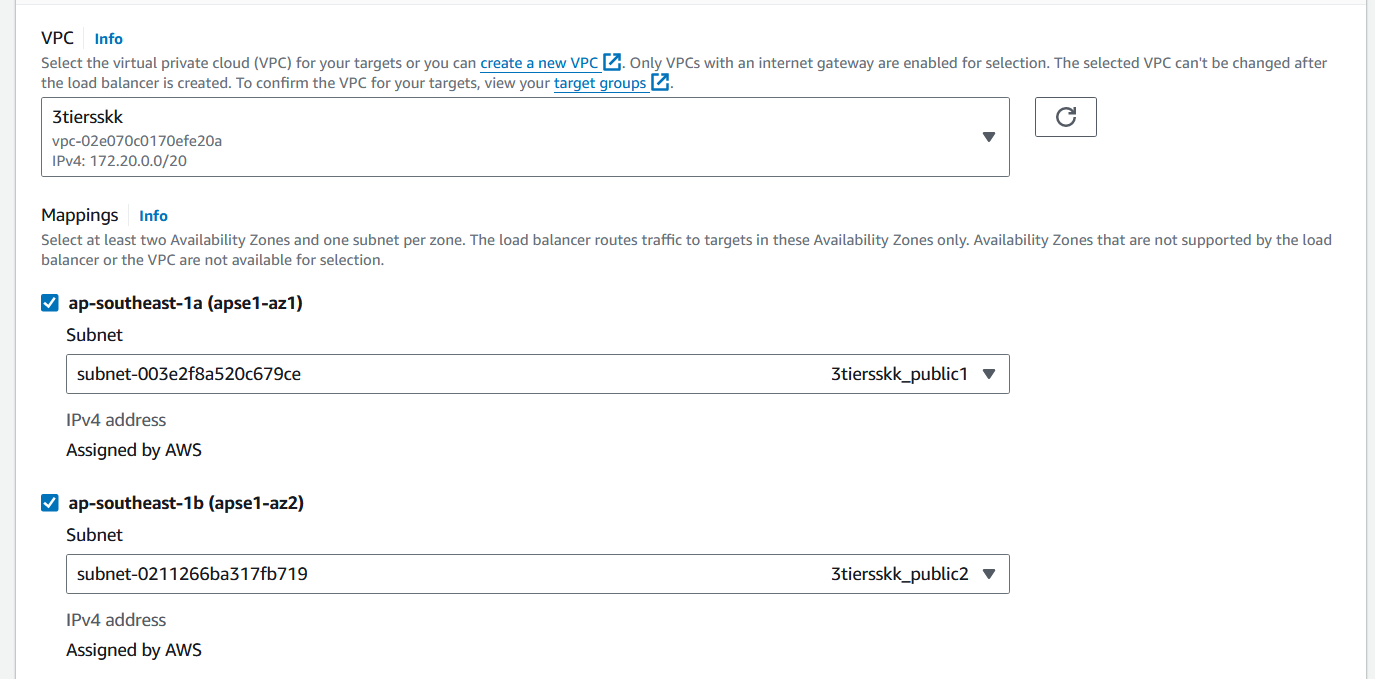
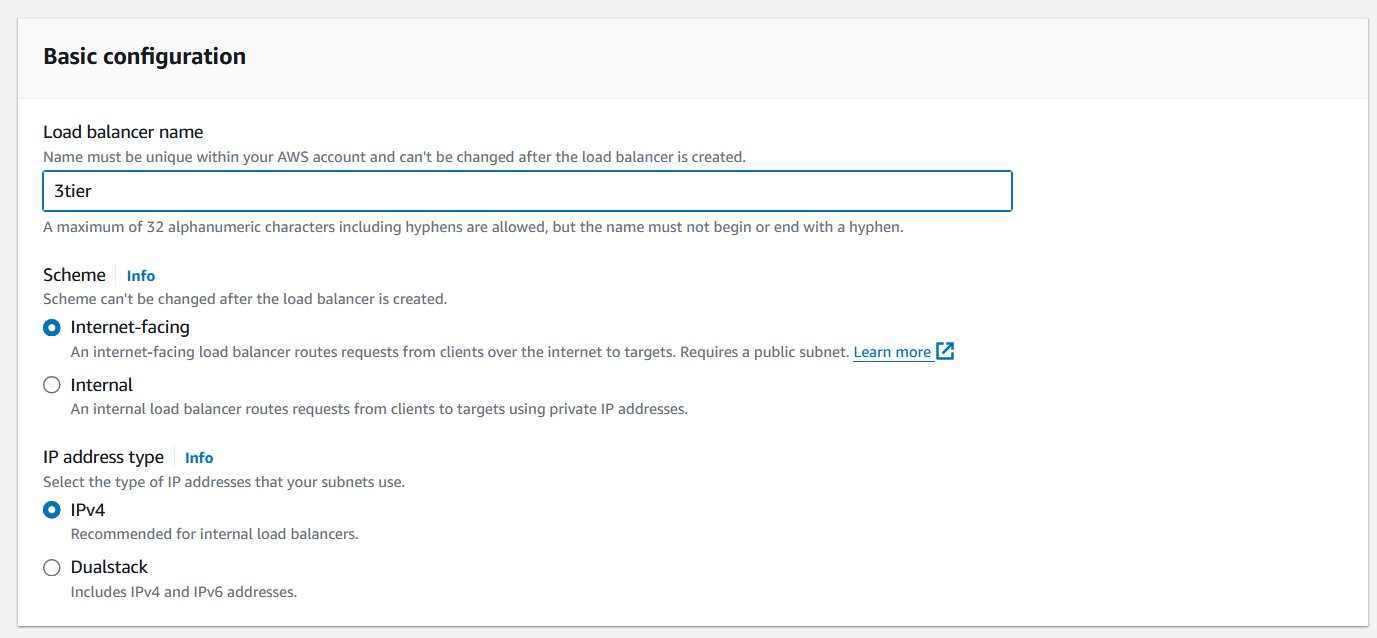
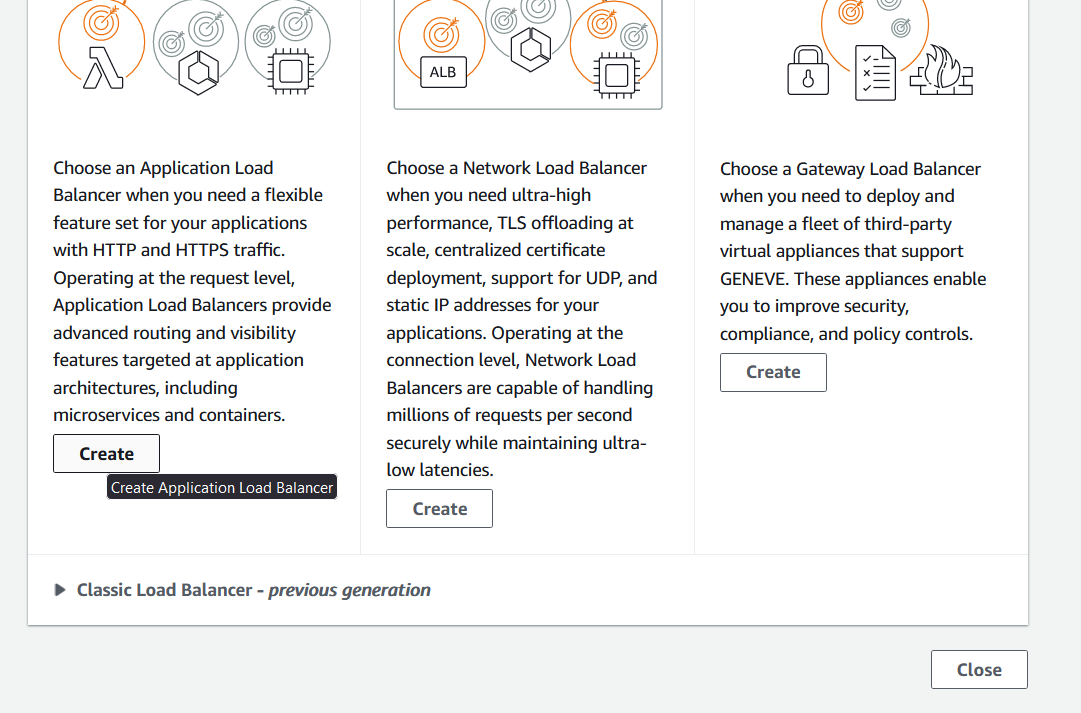
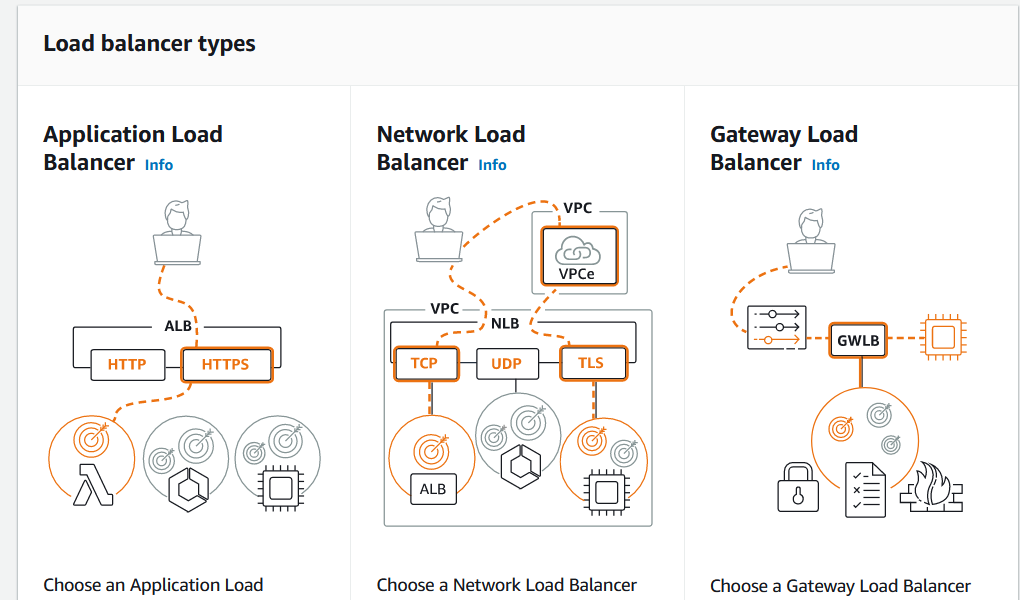
1. [ec2-user ~]$ find /var/www -type f -exec sudo chmod 0664 {} \;

Now, ec2-user (and any future members of the apache group) can add, delete, and edit files in the Apache document root, enabling you to add content, such as a static website or a PHP application.

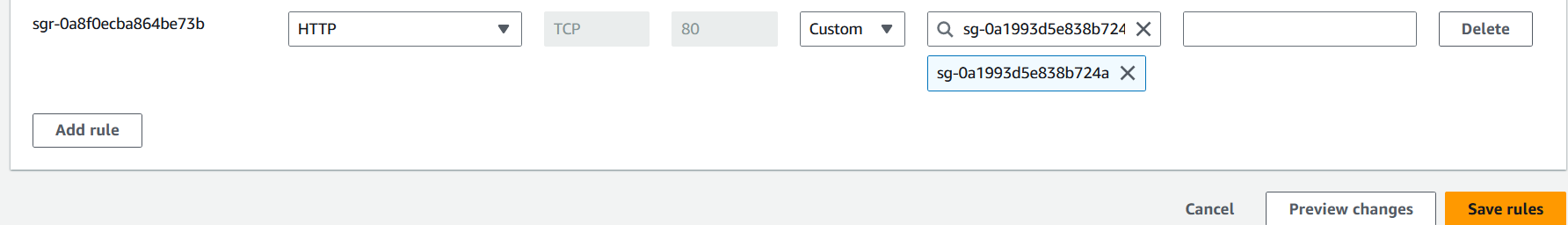




Load balancer



Security group of backend to allow alb



Create s3 to store necessary files

