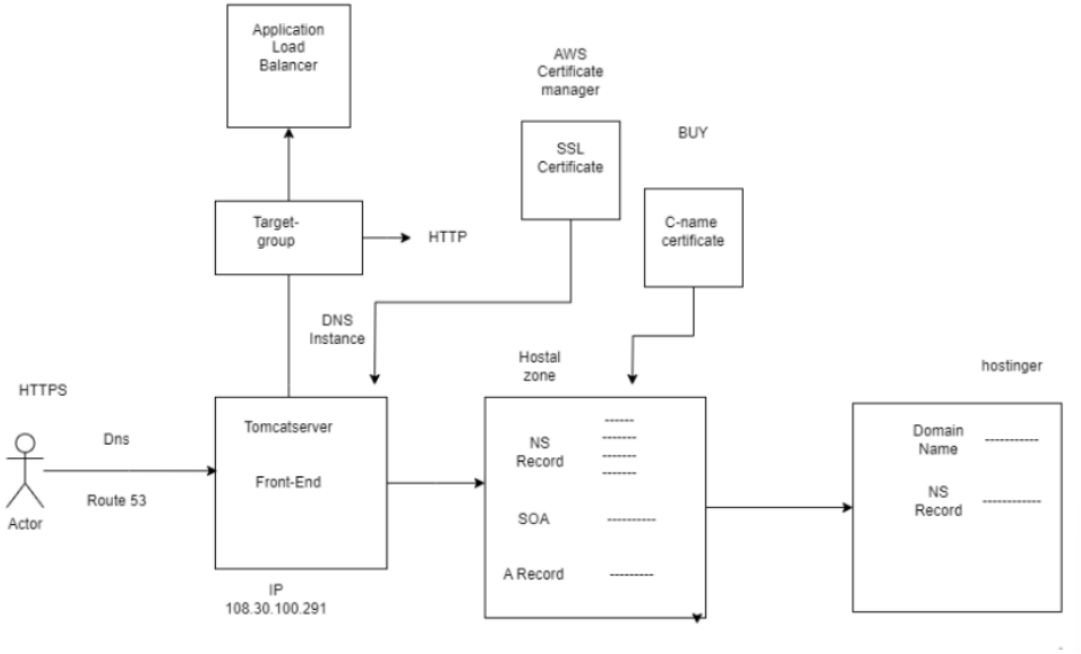
Route 53

Amazon Route 53 is a highly available and scalable cloud domain name system (DNS) service. Enables to customize DNS routing policies to reduce latency.

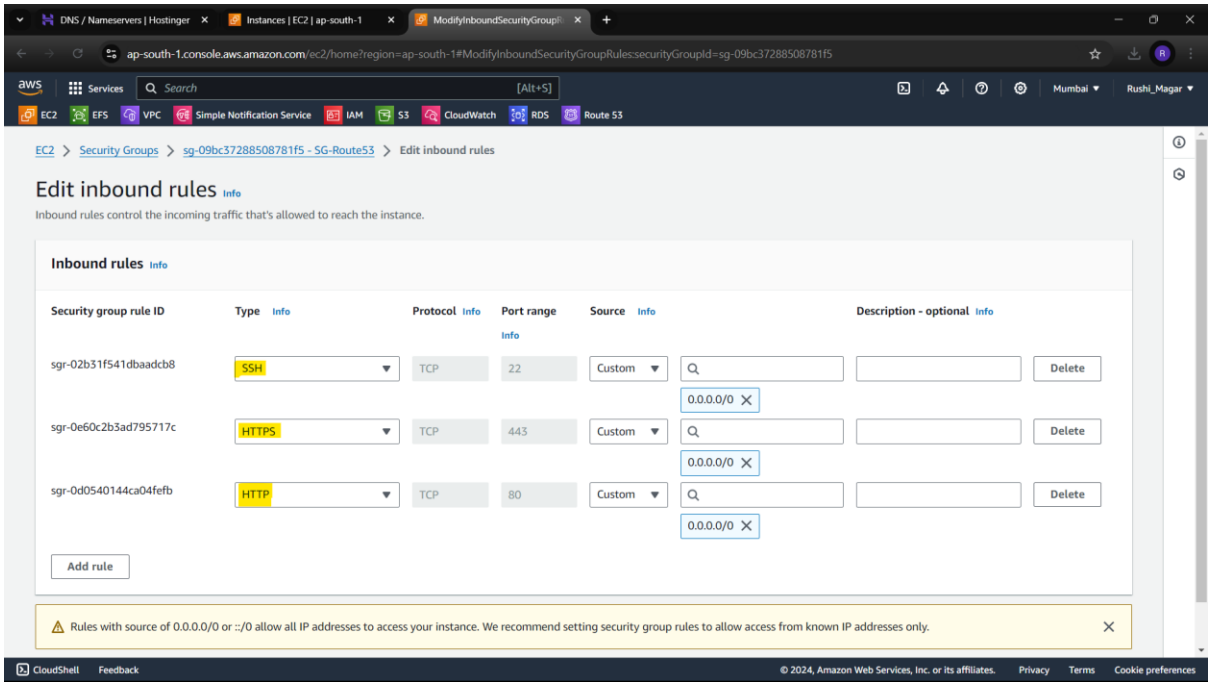
With Amazon Route 53, you can create and manage your public DNS records.

It is essential for conversion of user-friendly domain names into IP addresses so that internet communication can proceed without difficulties.



Create EC2 Instance

Make changes in security group→ Whitelist SSH, HTTP & HTTPS



Connect to Instance Terminal

Install server-

$ sudo apt install apache2

Now change path to **/var/www/html** & **remove (delete) index.html** file that already presented.

$ sudo rm index.html

```
ubuntu@ip-172-31-2-121:~$ cd /var/www/html/
ubuntu@ip-172-31-2-121:/var/www/html$ ls
index.html
ubuntu@ip-172-31-2-121:/var/www/html$ sudo rm index.html
ubuntu@ip-172-31-2-121:/var/www/html$
```

Go to Home directory & download CSS Template-

$ wget https://www.free-css.com/assets/files/free-css-templates/download/page288/global.zip

Install Unzip-

$ sudo apt install unzip

Now, unzip CSS Template-

$ unzip global.zip

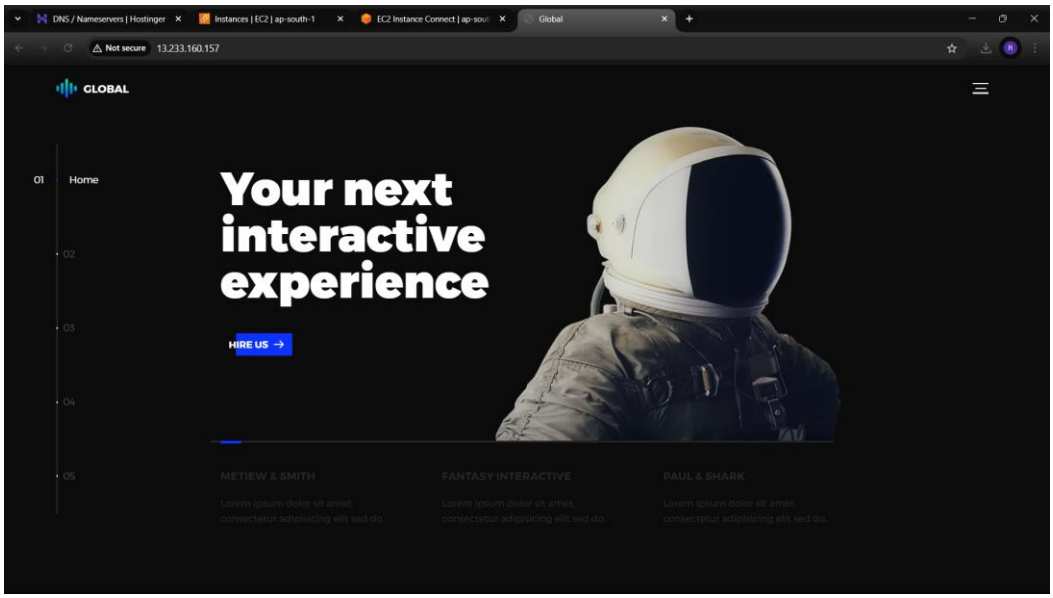
Then move unzipped file **contains only** to /var/www/html/

$ sudo mv global-master/* /var/www/html/

Check for files-

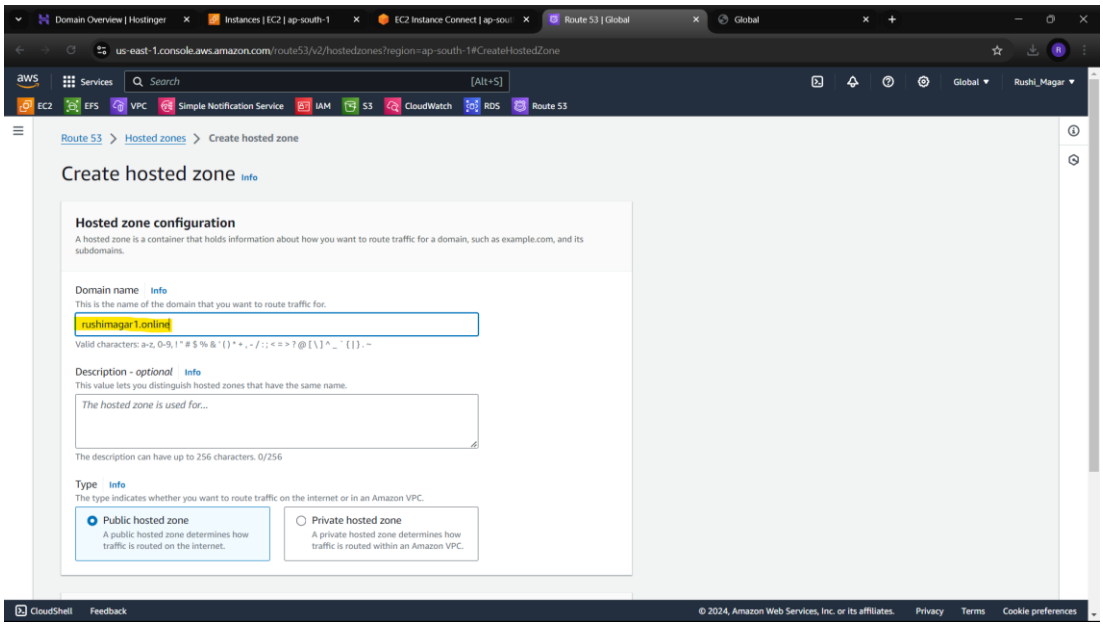
cd /var/www/html/

Finally, with public IP check its working properly or not-

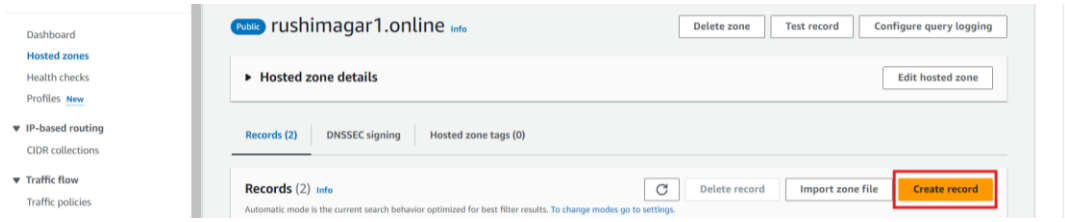


Route 53 service

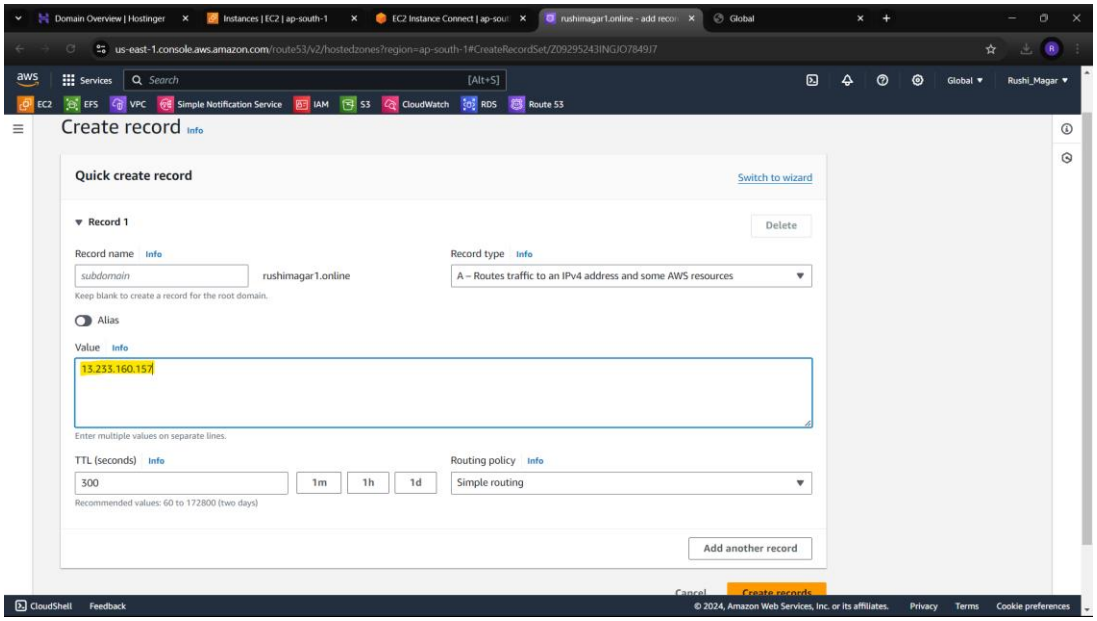
Create Hosted Zone → mention only your Domain Name → Create



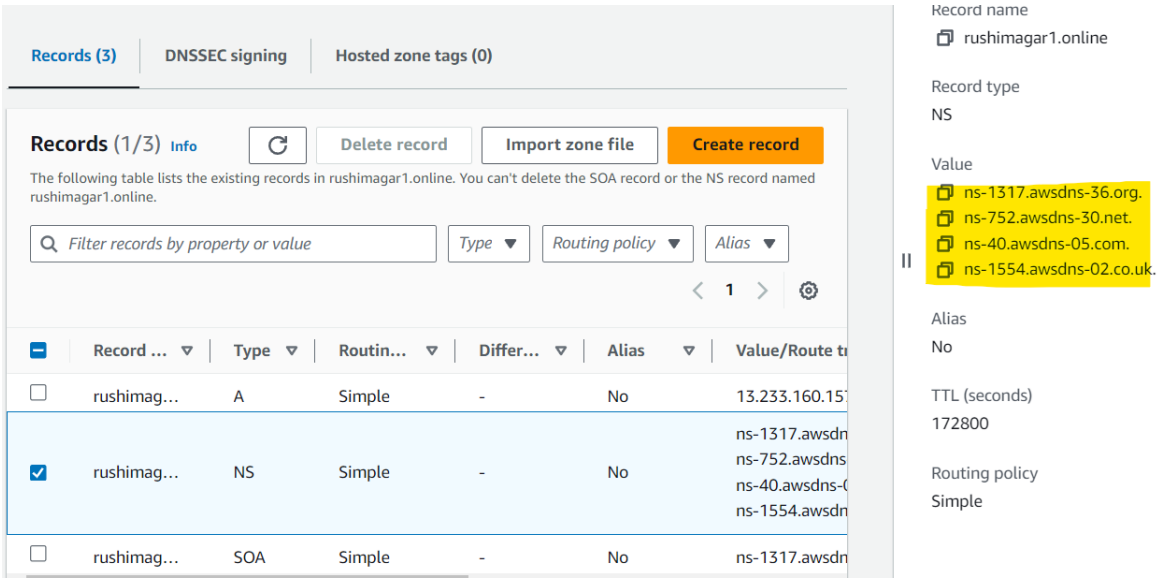
Create a new record



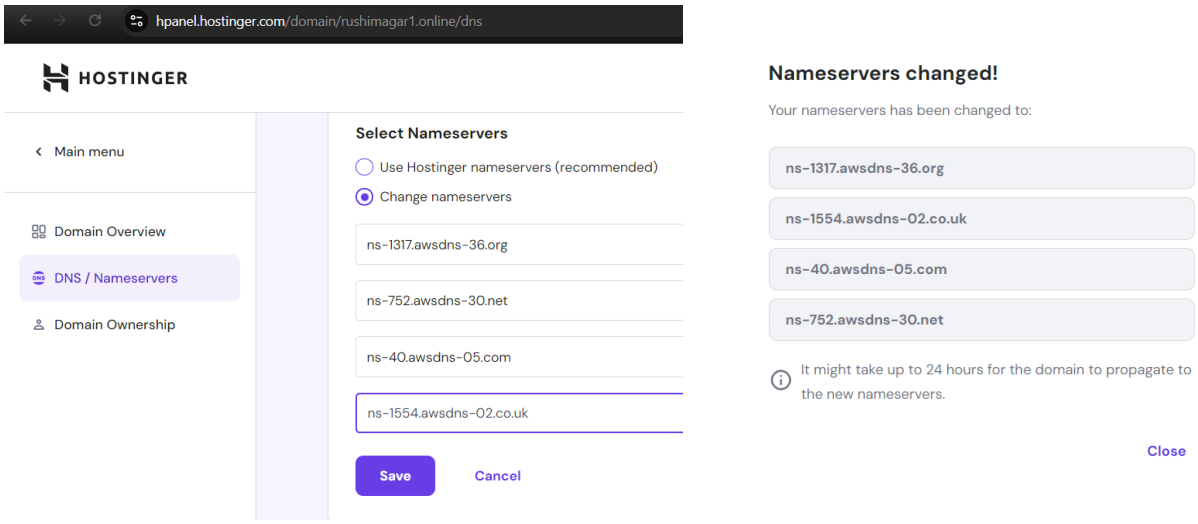
Add Public IP only → Create Record (A certificate)



NS (Name Server) Records-

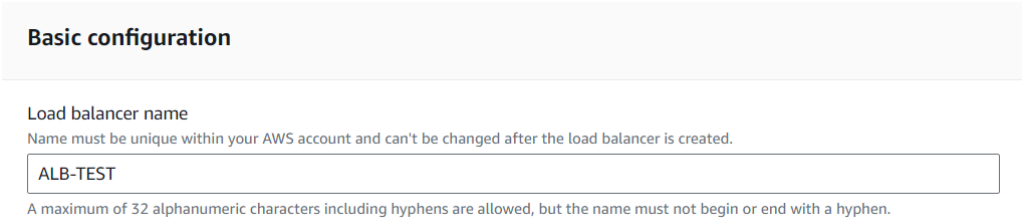


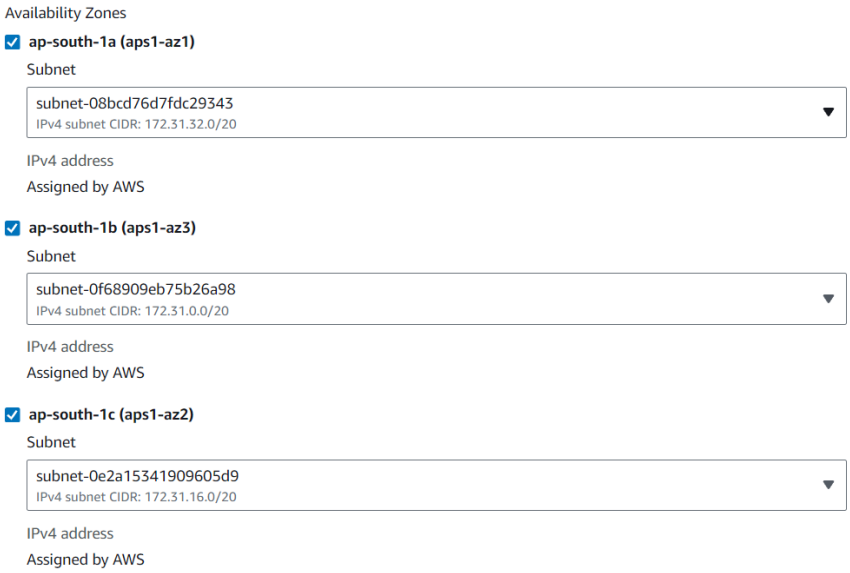
Assing these **Value to Hostinger → Manage → DNS/Nameservers**



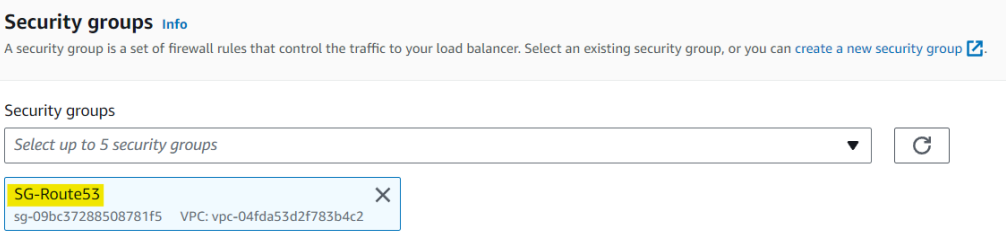
Create Load Balancer

→Application Load Balancer

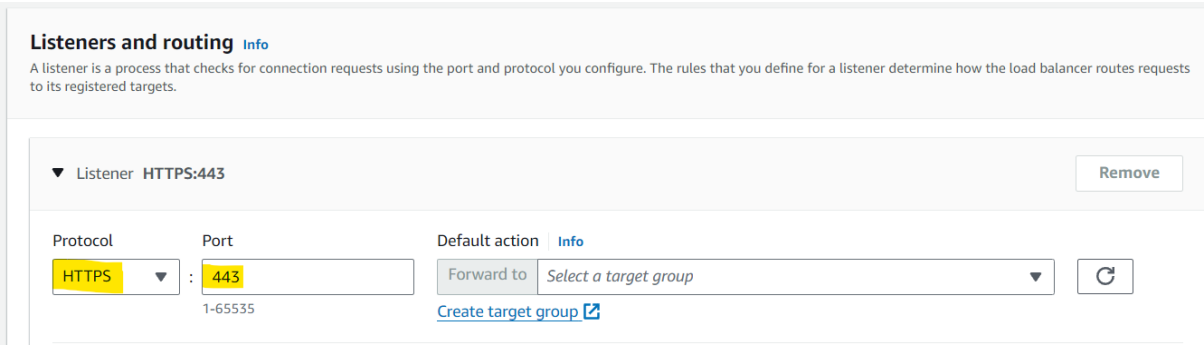




Select Security group same as Instance

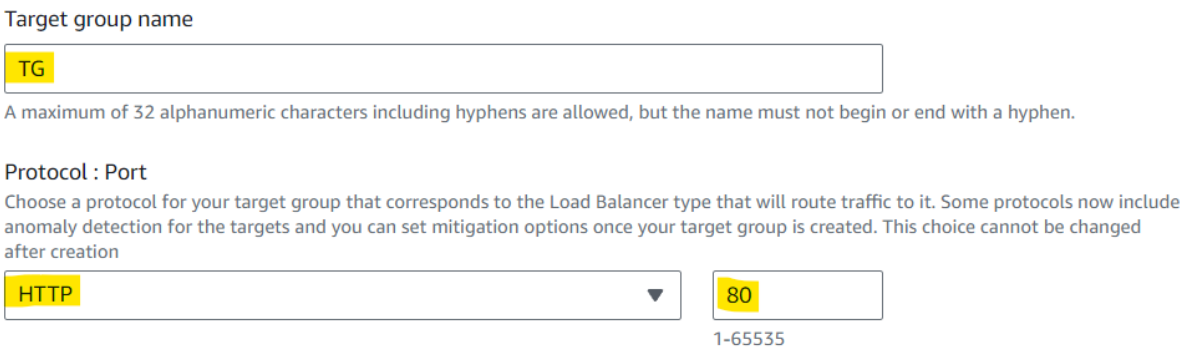


Change Protocol HTTP to **HTTPS : 443**

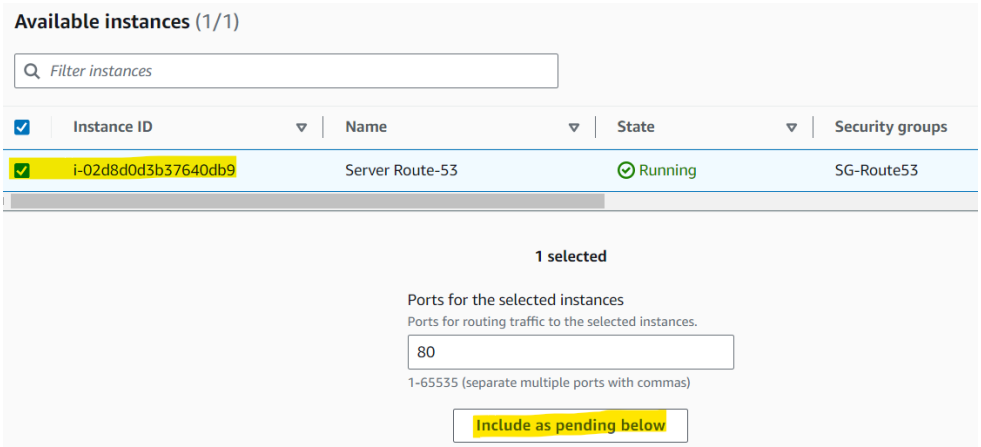


Create Target Group as well

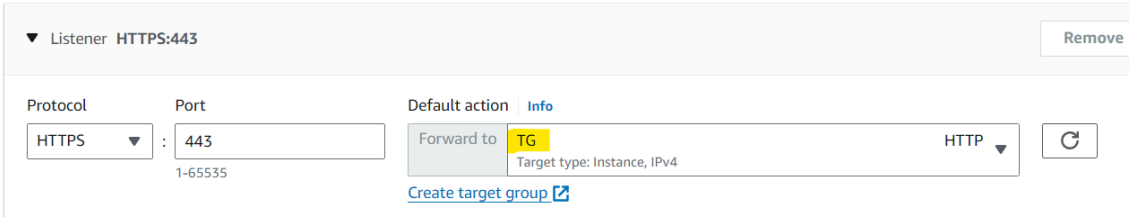
Here change Protocol HTTPS to **HTTP : 80**



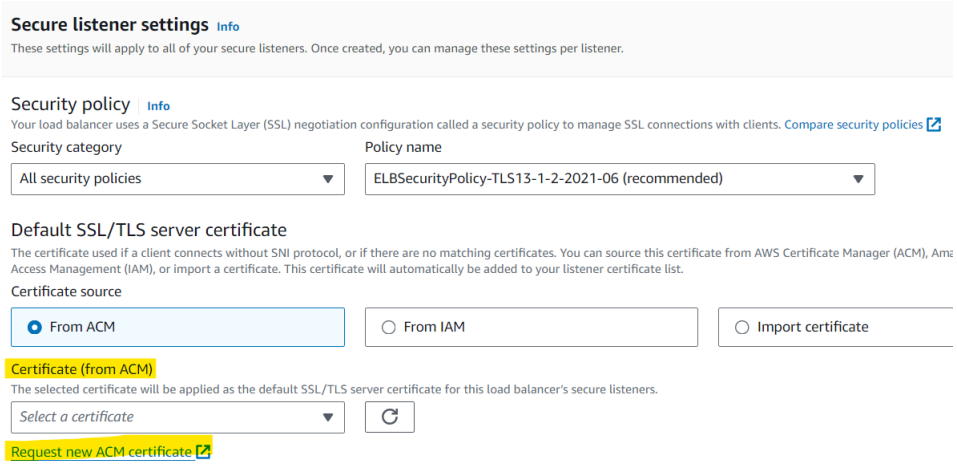
Select Instance ID → Include as pending Below → Create Target Group

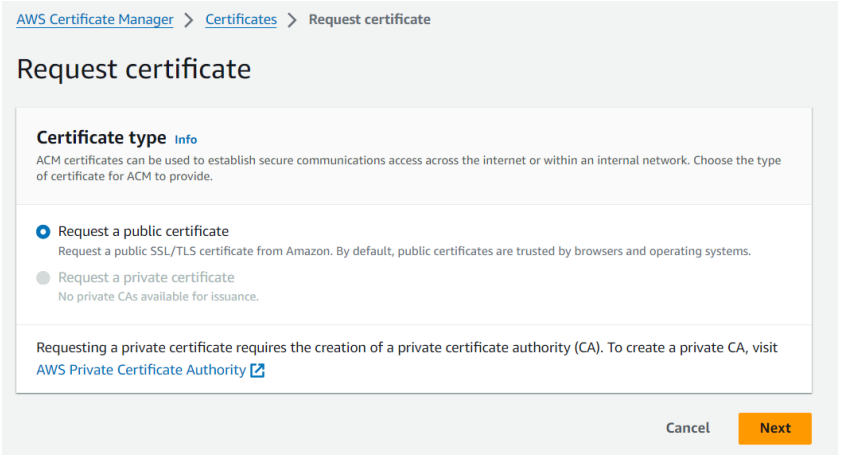


Again, go to Load Balancer → Select Target Group that now created.

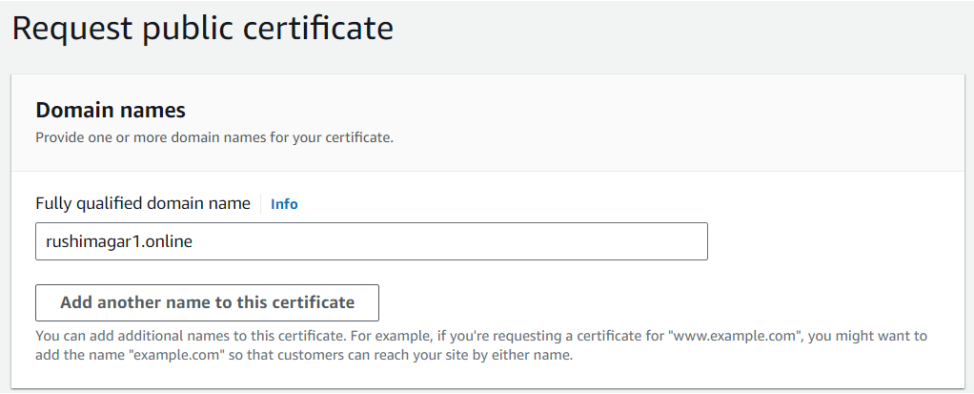


Make a request for SSL to ACM (AWS Certificate Manager)-

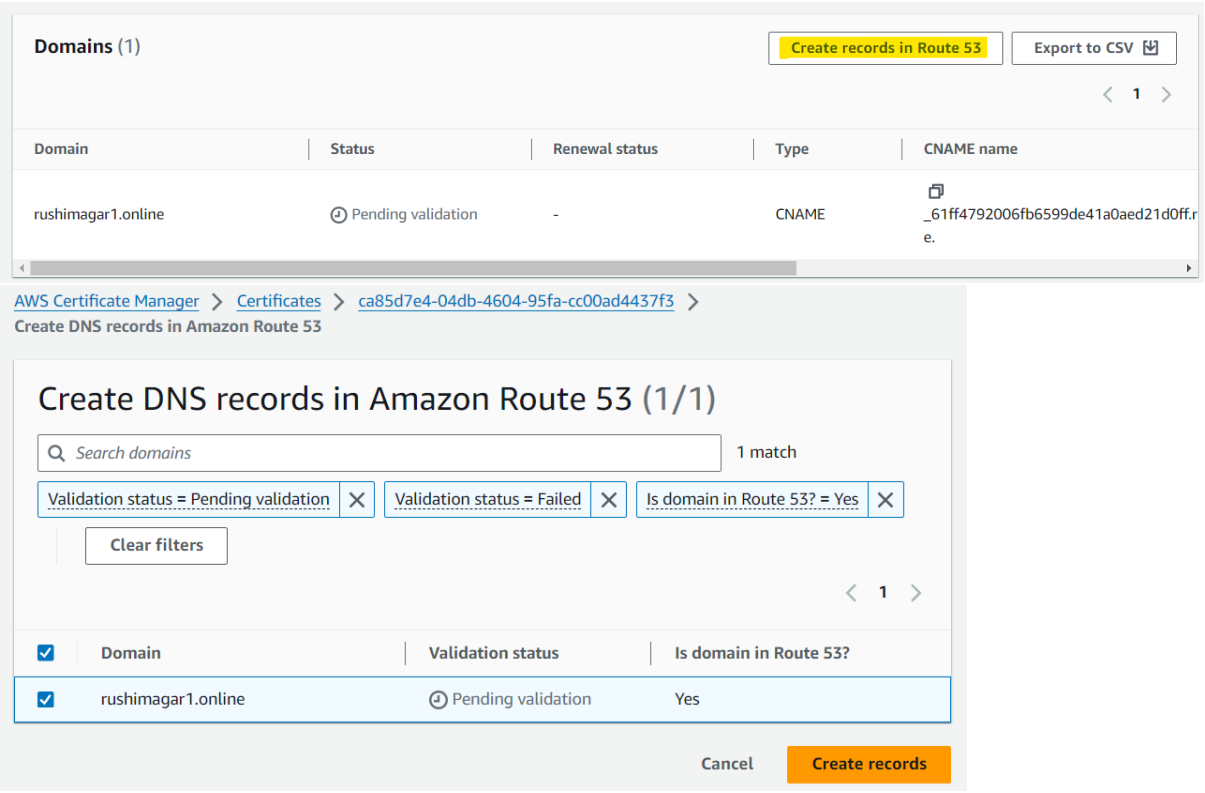




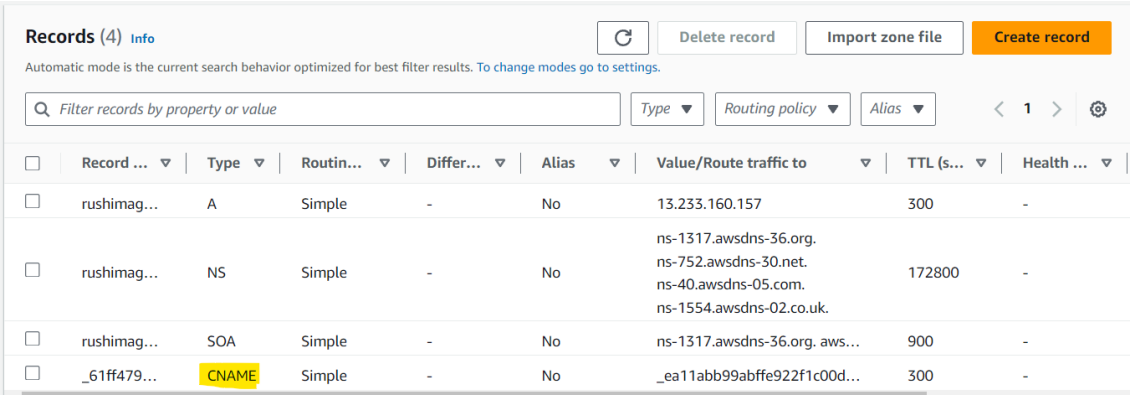
Mention Your Domain Name only → Request



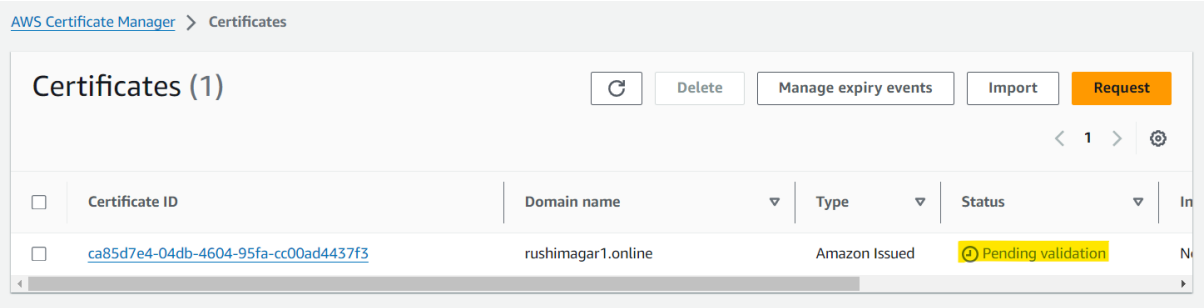
Select Create records in Route 53

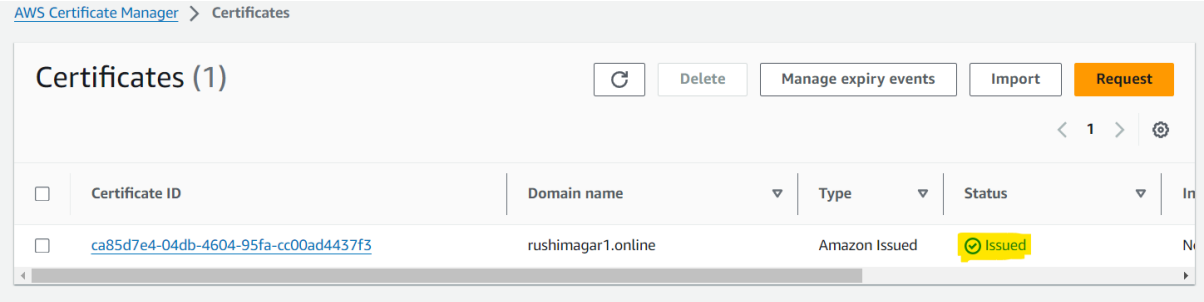


Here new record **CNAME** is created in Route 53

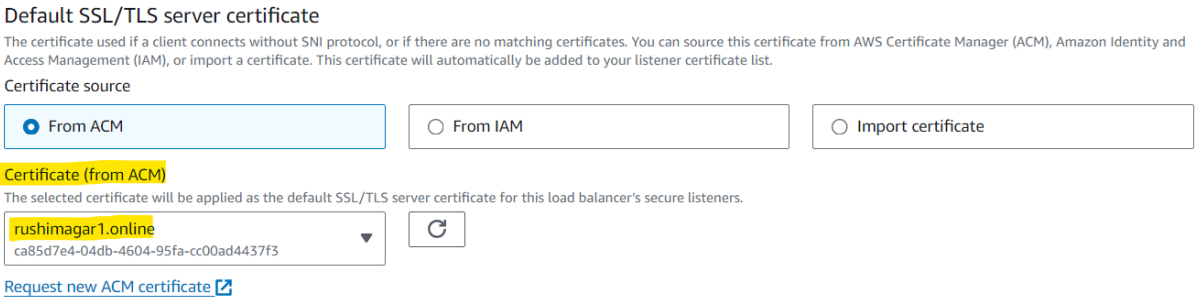


And wait for changing status to **Issued**



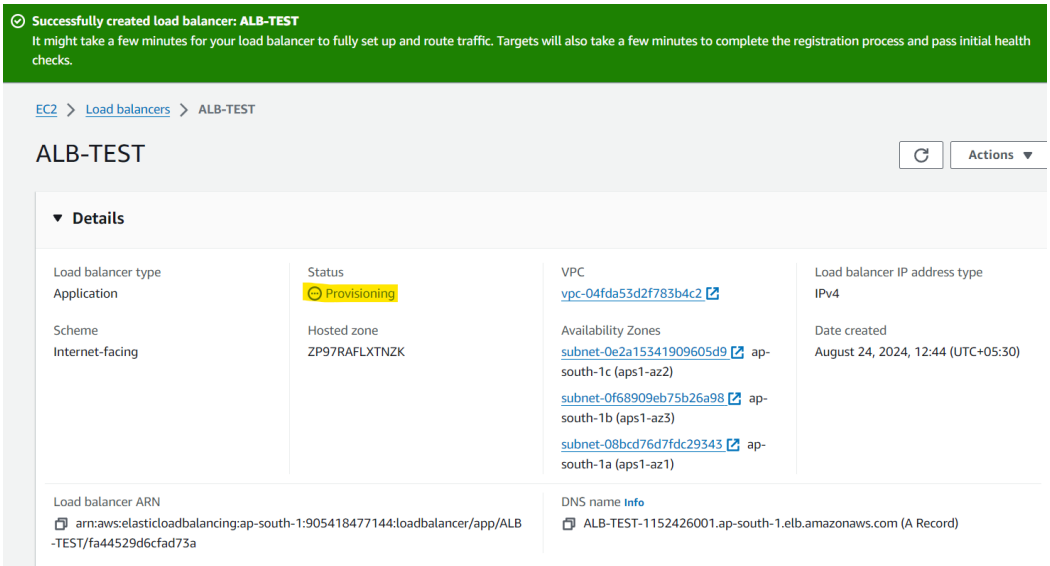


Now, in Load Balancer Select Certificate

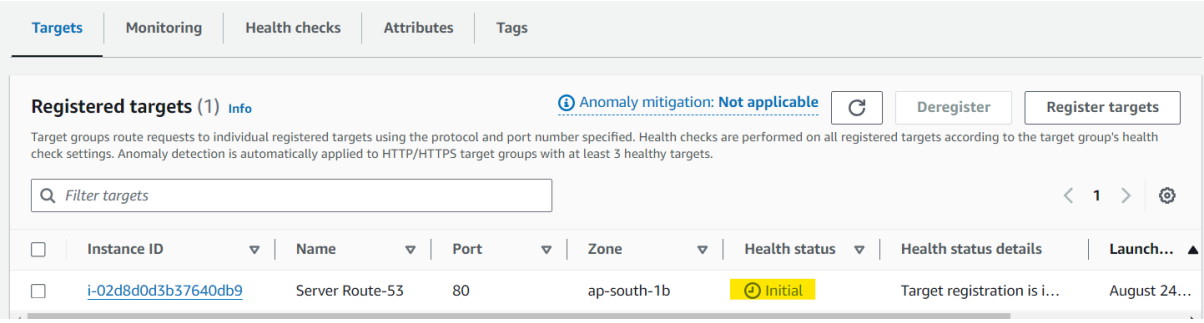


And, Create Load Balancer.

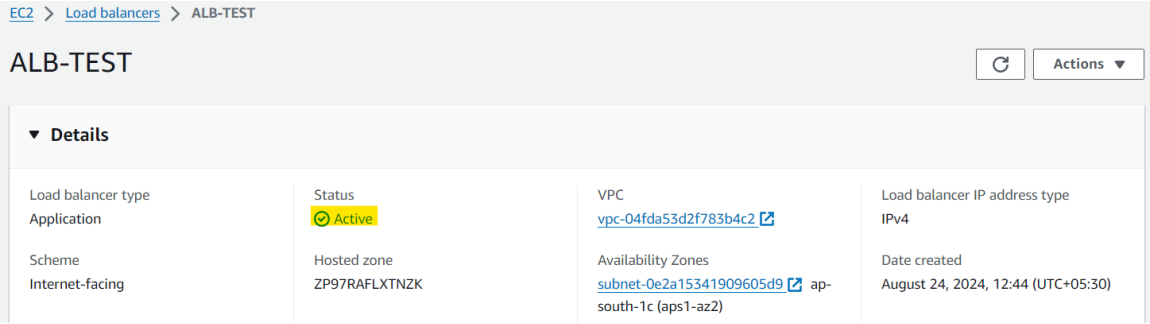
Wait for Changing Status of Load Balancer to **Active**

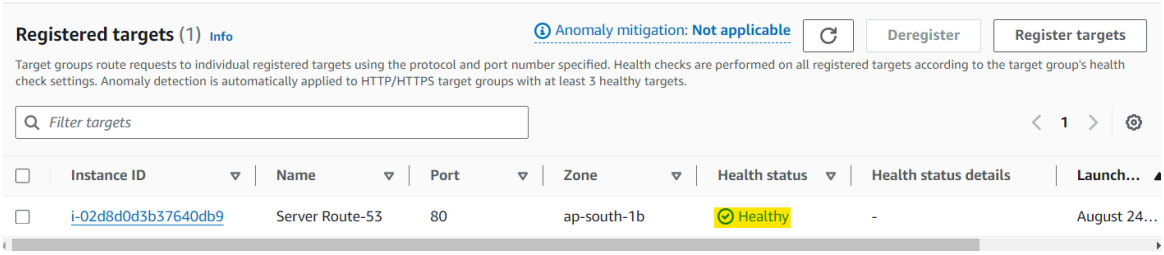


And for Target Group also

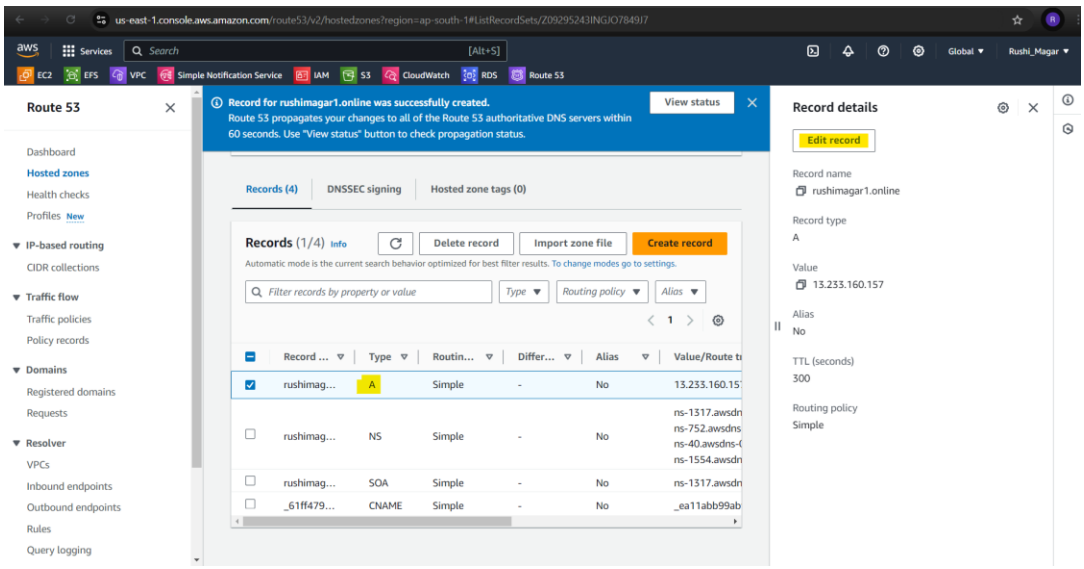


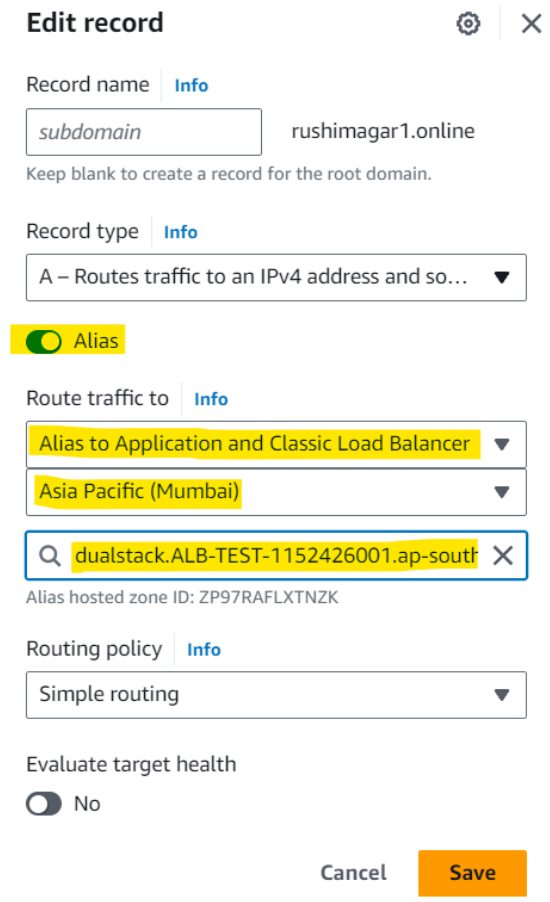
Status is changed for Load Balancer & Target group



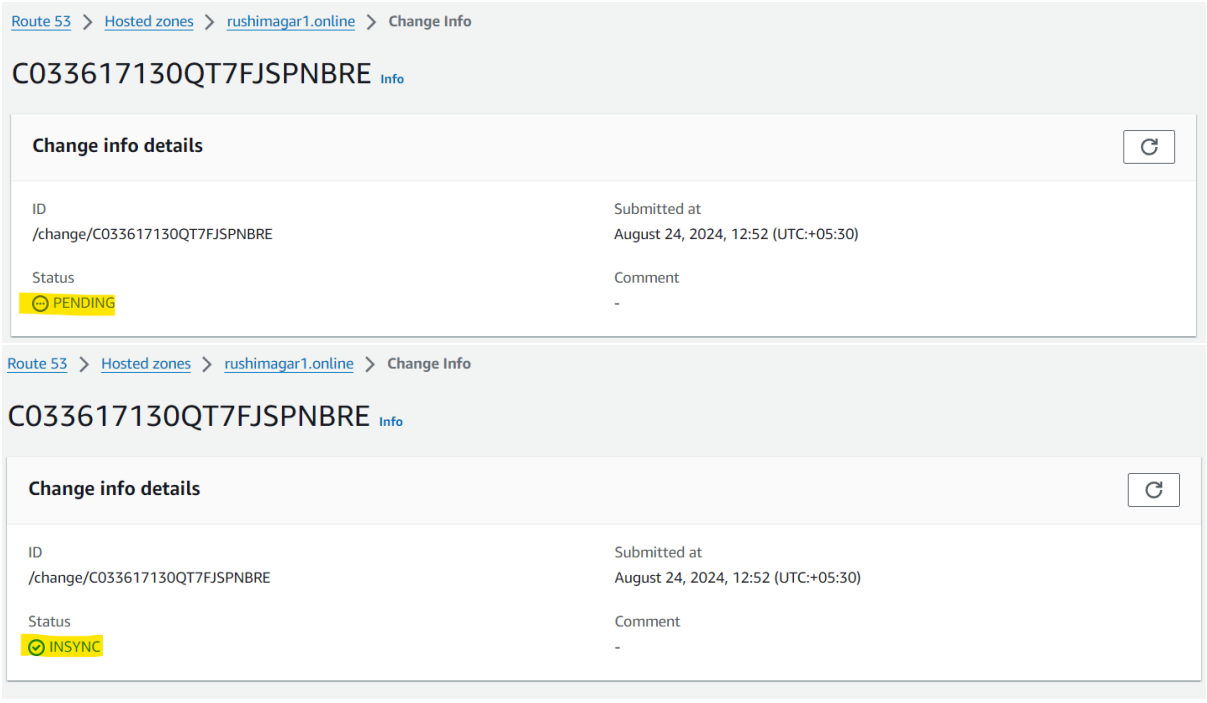


In Route 53, edit A Record

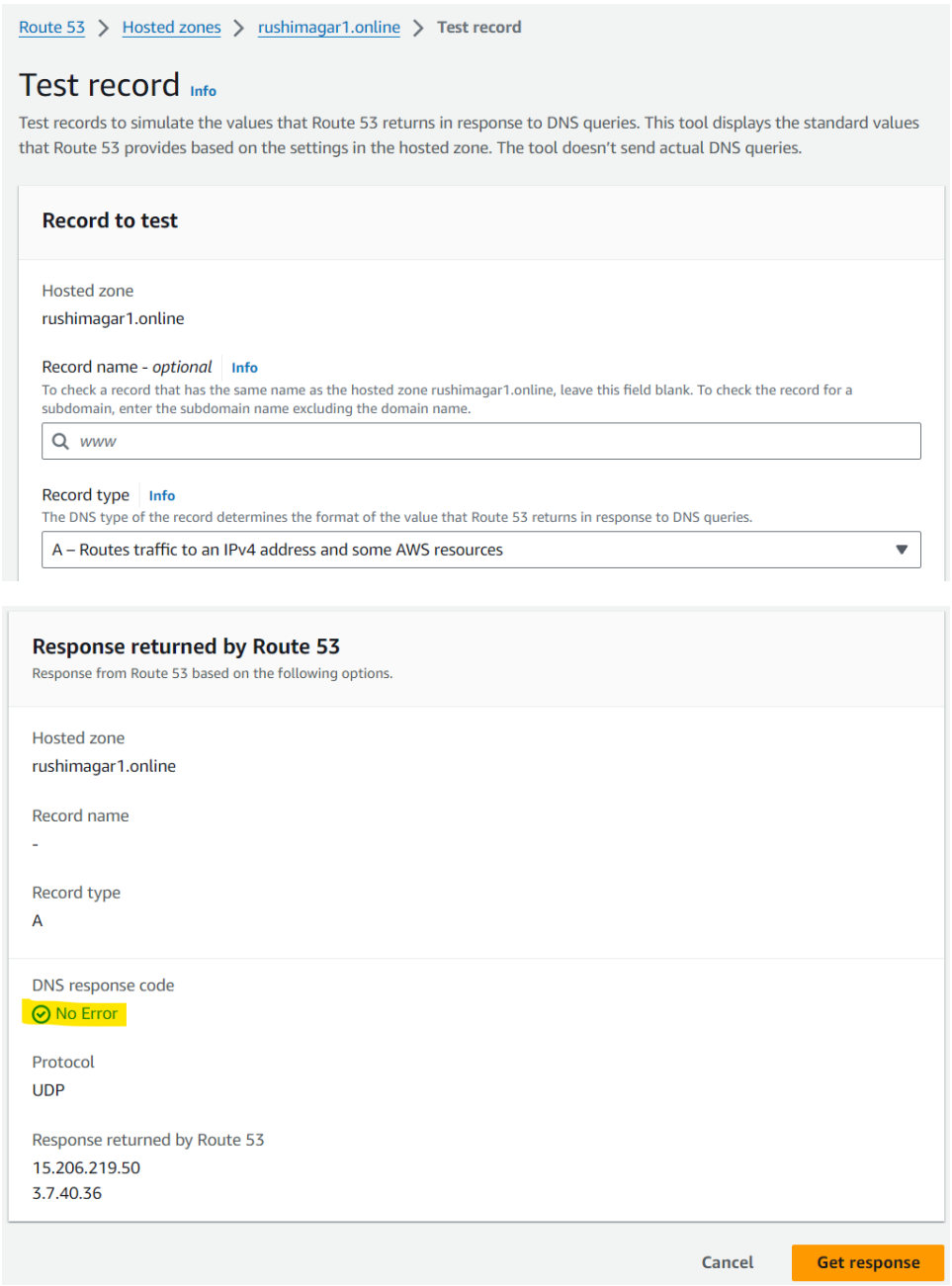




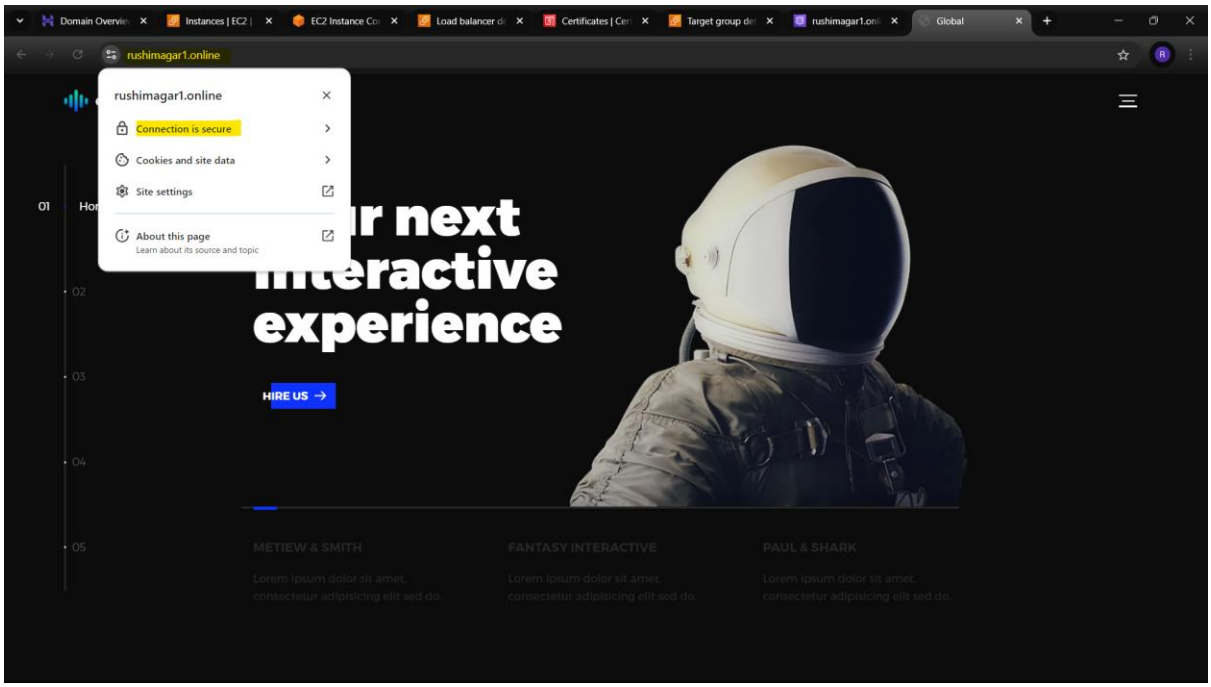
We can see status from above Notification – (Pending → INSYNC)



Test Record using Domain & Public IP



Test website using domain https://rushimagar1.online/



For Deletion

1. Route 53 - Delete **A & CNAME** records only → Delete Hosted Zone
2. Delete Load Balancer
3. Delete Target Group
4. ACM – Delete SSL Certificate
5. Terminate Instance