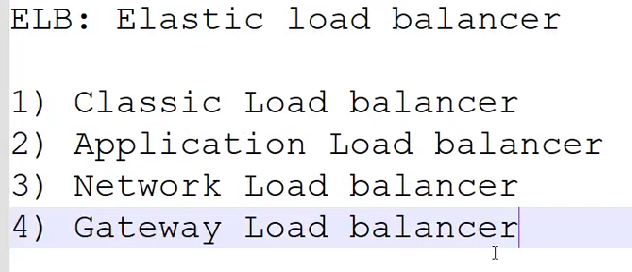
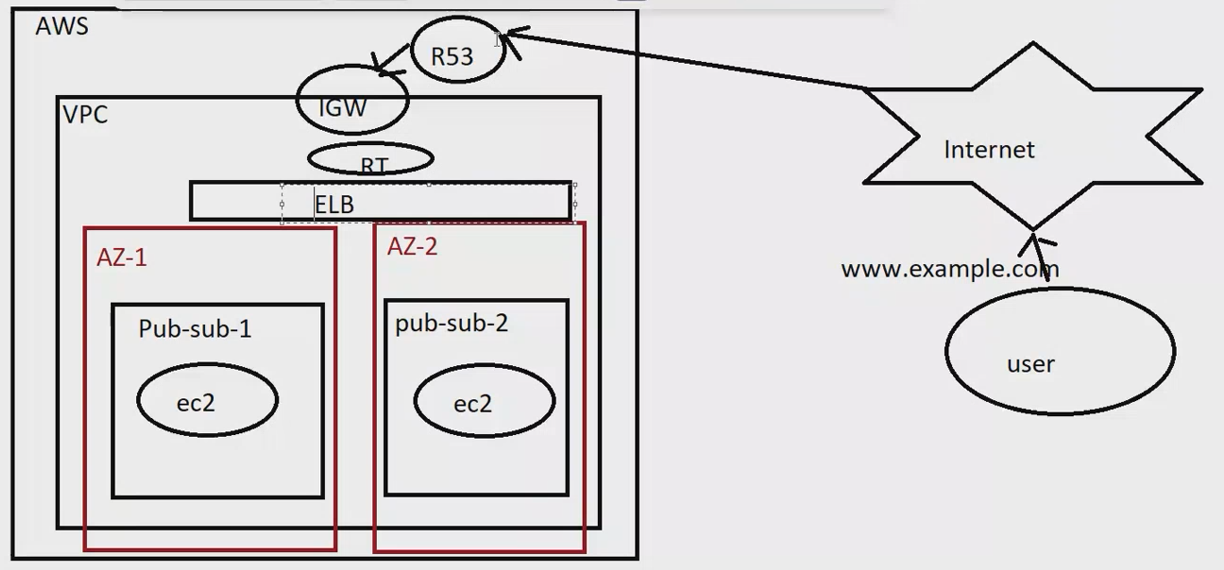
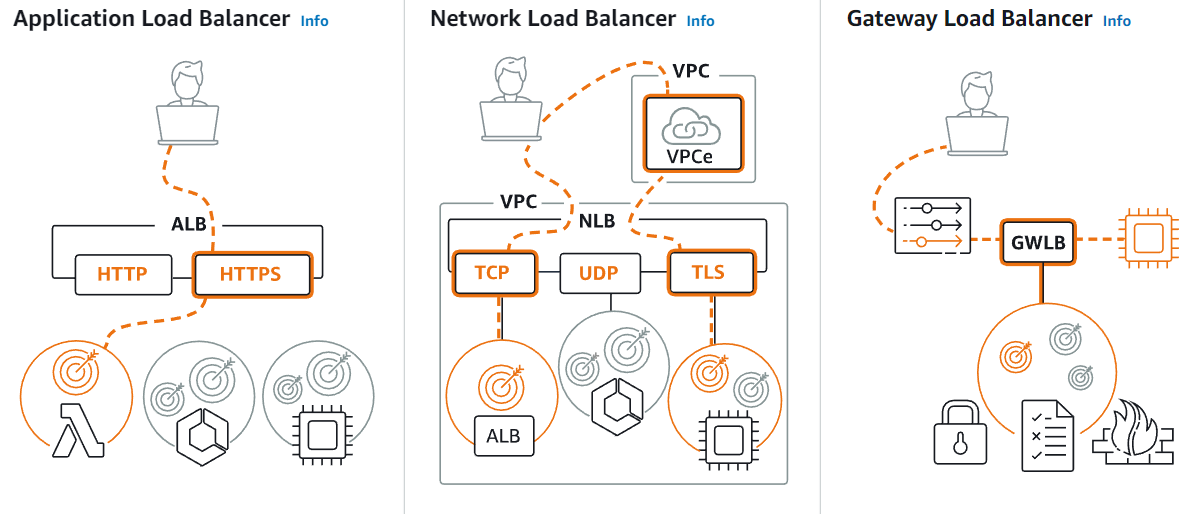
**ELASTIC-LOAD-BALANCER**

**“TO CONTOL/ DISTURBUTE THE TRAFFIC IN MULTIPLE ZONES”**

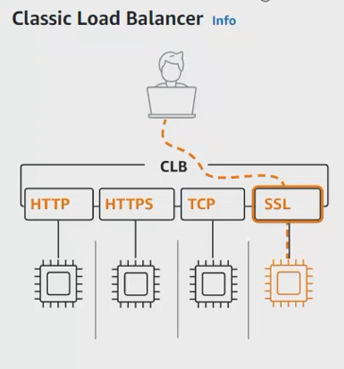
**1. Write down notes on ELB**

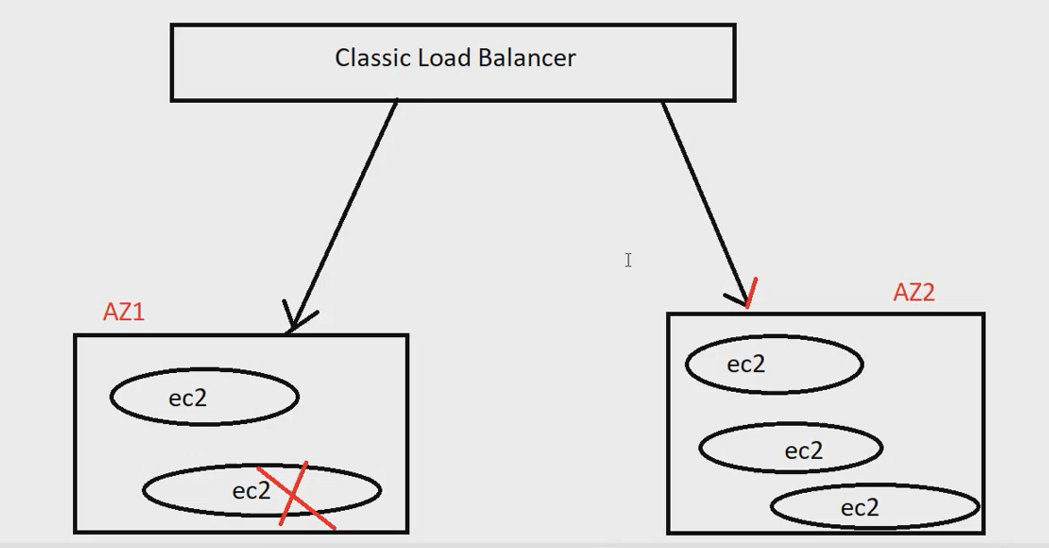




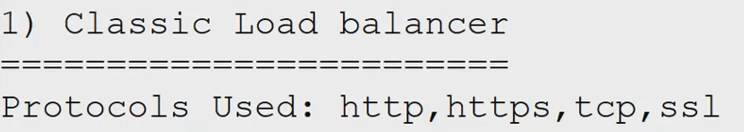


**A) CLASSIC-LOAD-BALANCER**



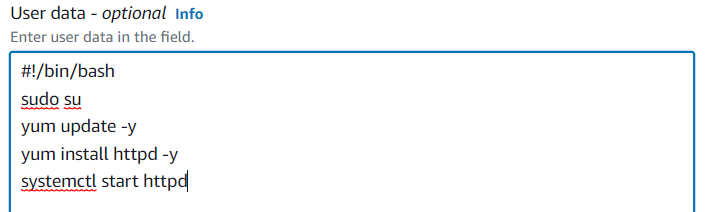


\*\* TO USE CLB WE HAVE TO CONFIGURE EQUAL NO. OF EC2-SERVER IN BOTH THE ZONE



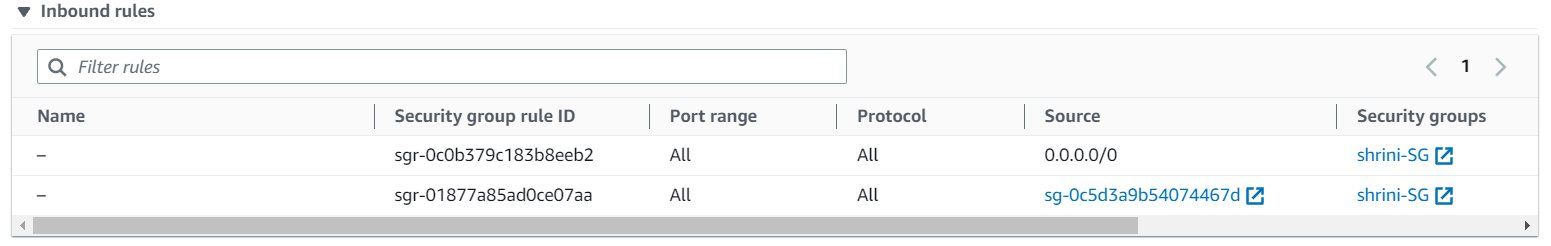
\*\* WE CANNOT CONFIGURE MULTIPLE LISTNERS (80,81,82 IT ONLY WORKS ON 80 PORT)

\*\* Bootstraping = It helps to create any applications in ec2 on launching period with the help of bash script  
\*\* we can’t edit the script once it’s created

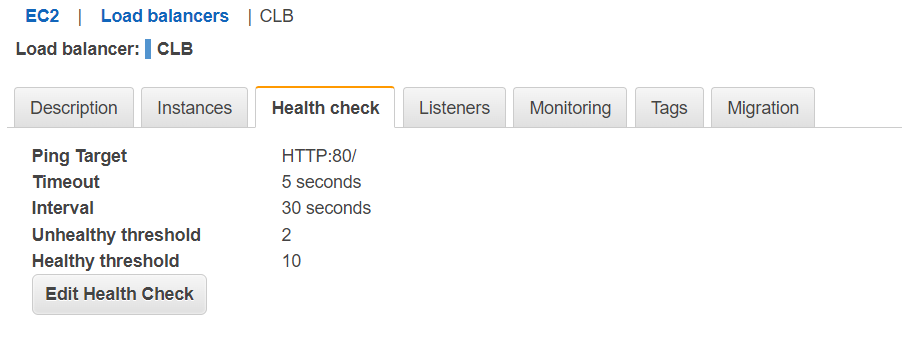


\*\*For health checks of instances should be IN-SERVICE so we have to make the security group with the same security group in LOAD BALANCER

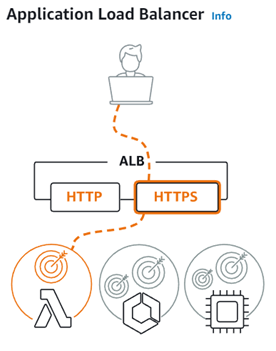
“EC-2 SECURITY GROUP”

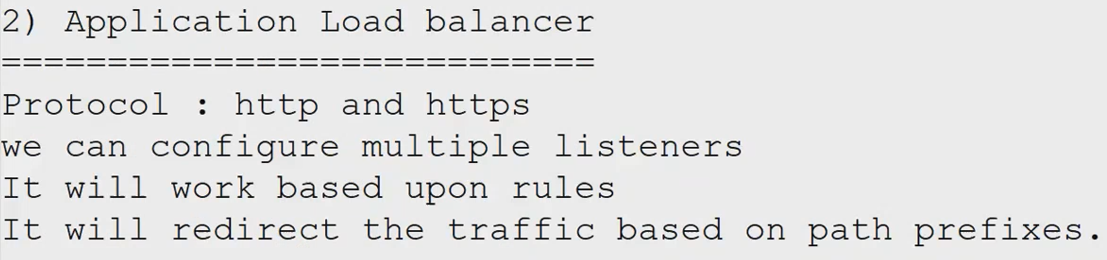


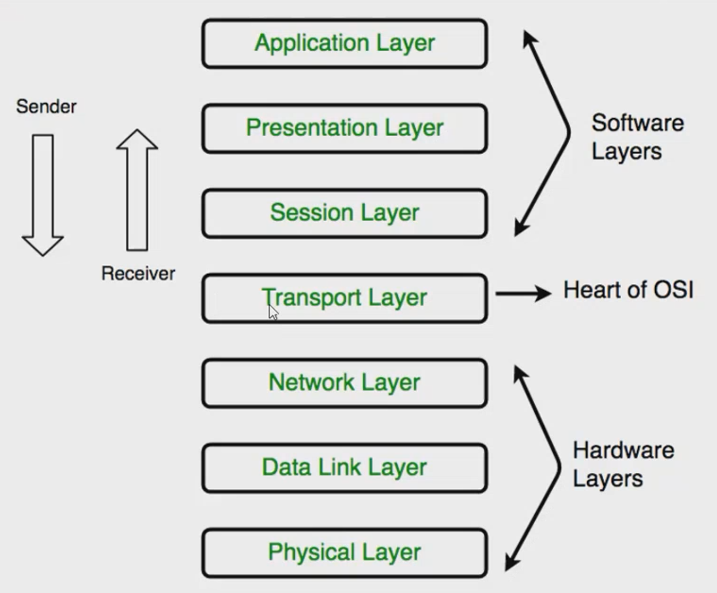
“CLB- HEALTH CHECK”



**B) APPLICATION-LOAD-BALANCER**

****

****

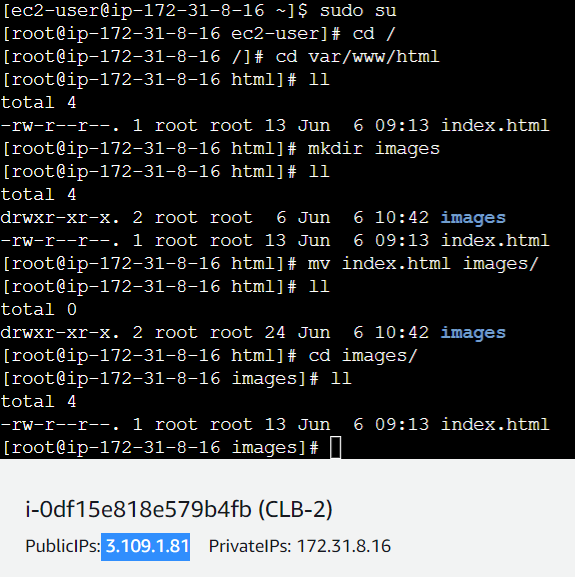
****

**\*\* IT WORKS ON APPLICATION LAYER**

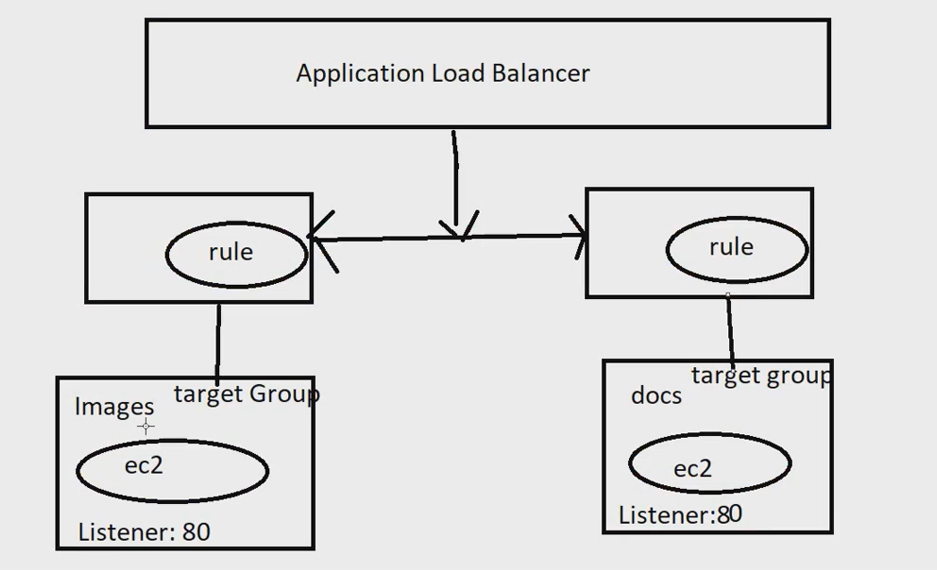
**IF WE WANT TO REDIRECT THE TRAFFFIC BASED ON PATH PREFIX:**

****

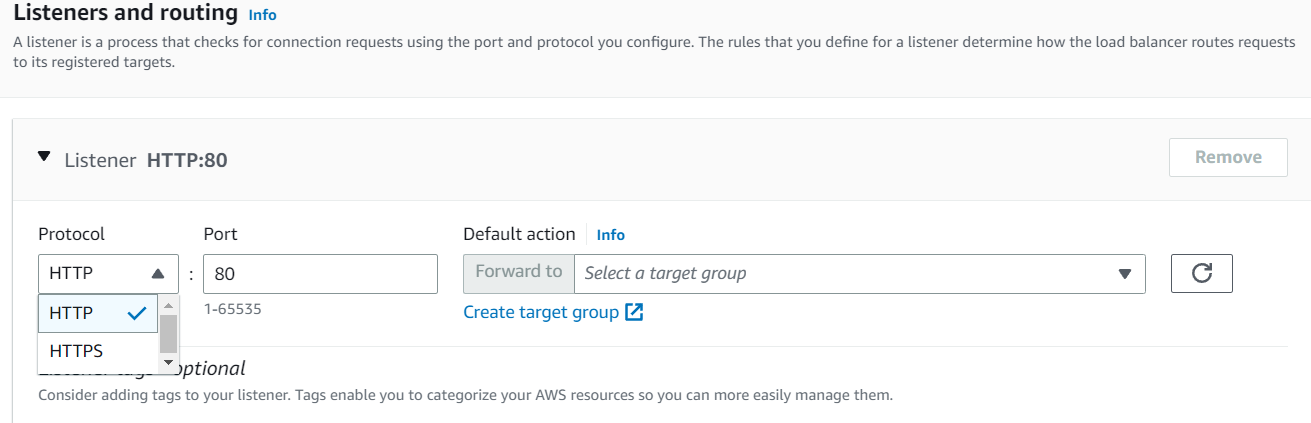
**“PREFIX will works on different port no. of any services”**

****

**TO RUN IN MULTIPLE LISTENERS we use APPLICATION LOAD BALANCER WITH THE HELP OF “RULES”**

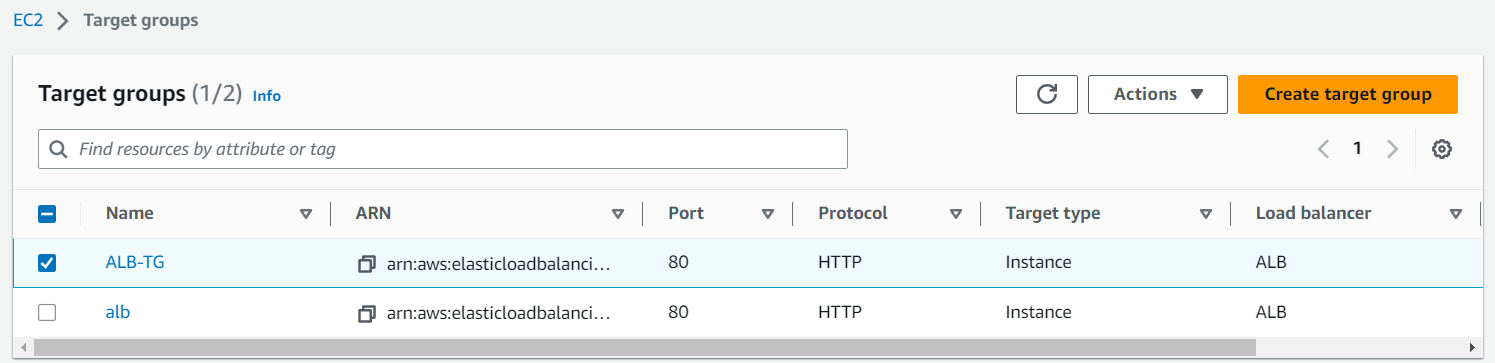
****

**“ALB ONLY WORKS ON HTTP AND HTTPS ”**

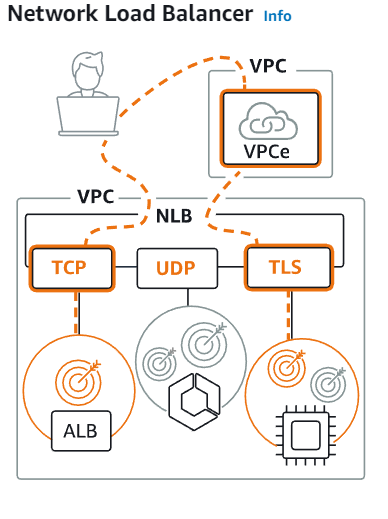
****

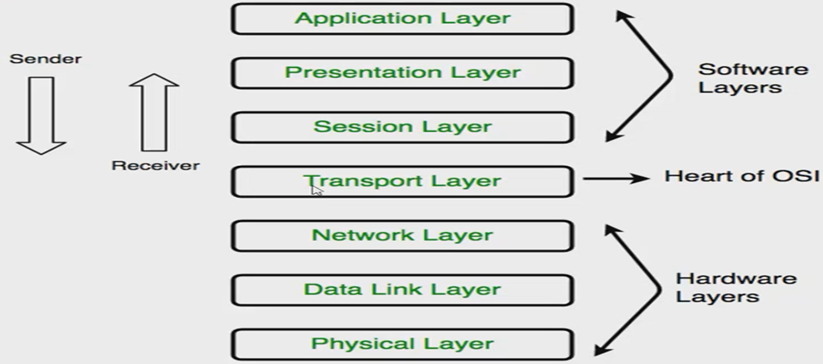
**“TARGET GROUPS”**

**Target groups route requests to one or more registered targets, such as EC2 instances, using the protocol and port number that you specify**

****

**C) NETWORK-LOAD-BALANCER**

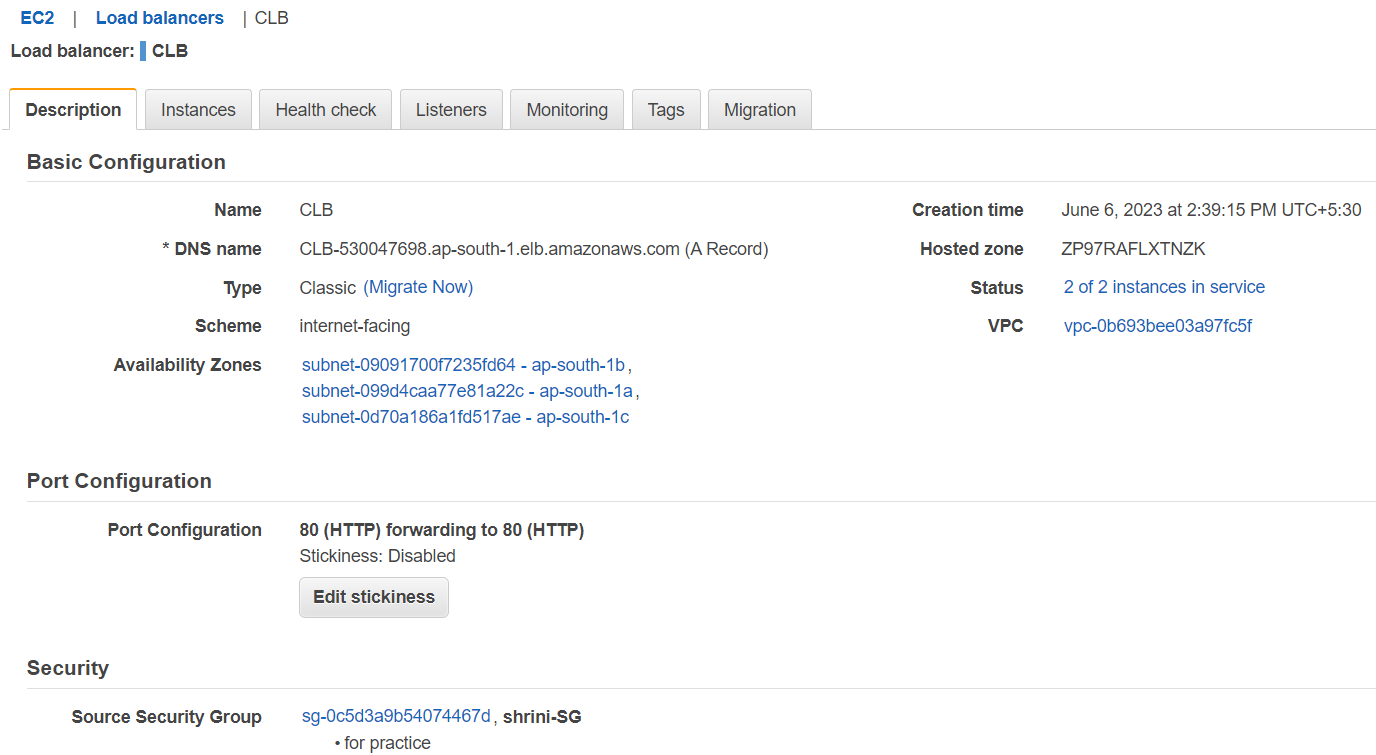
****

****

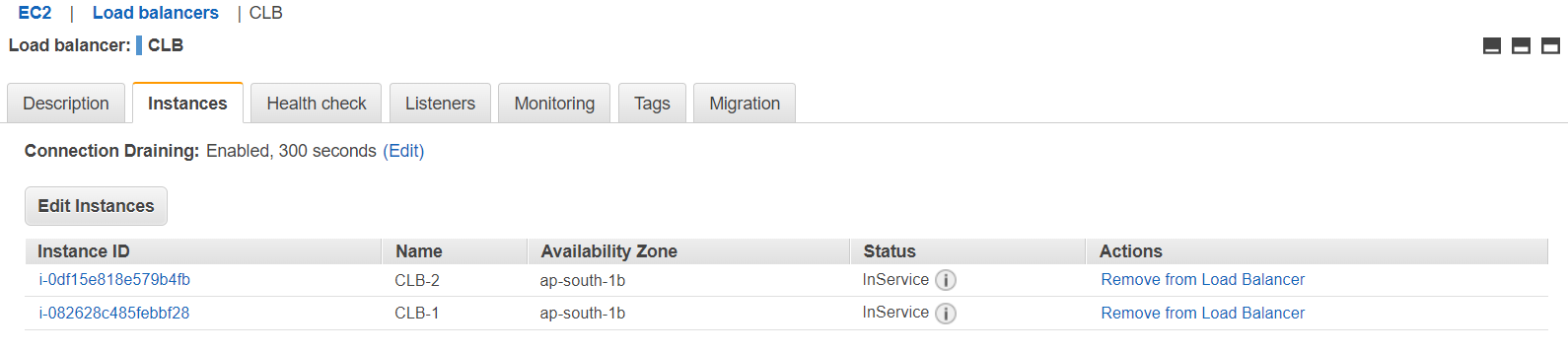
**\*\* IT WORKS ON SESSION LAYER and WE CAN ASSIGN ELASTIC IP TO NLB”**

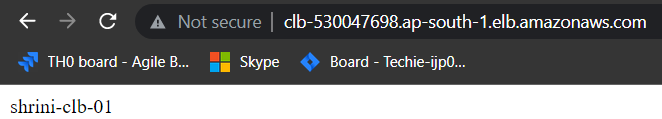
**\*\* AND OTHER ALL PARAMETERS ARE SAME TO THE APPLICATION LB**

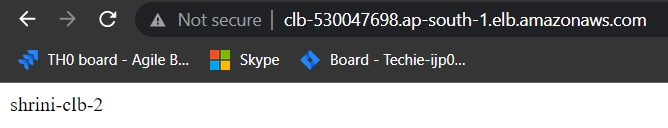
**2. Configure Classic Load balancer.**

****

**\*\*if any one server having issue then CLB gives 300 seconds to hold on it**

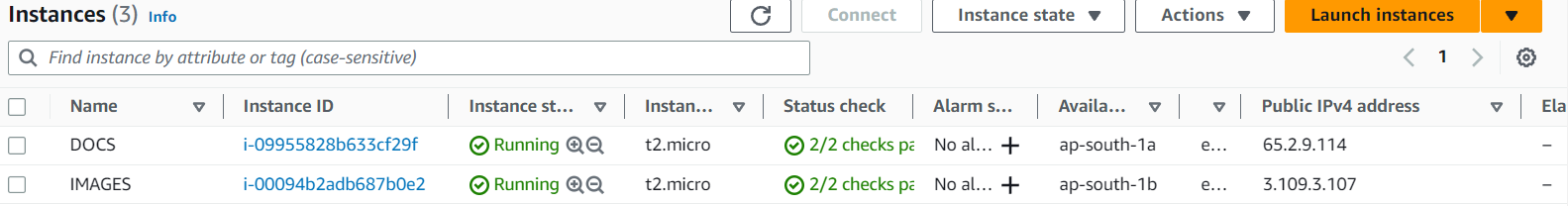
****

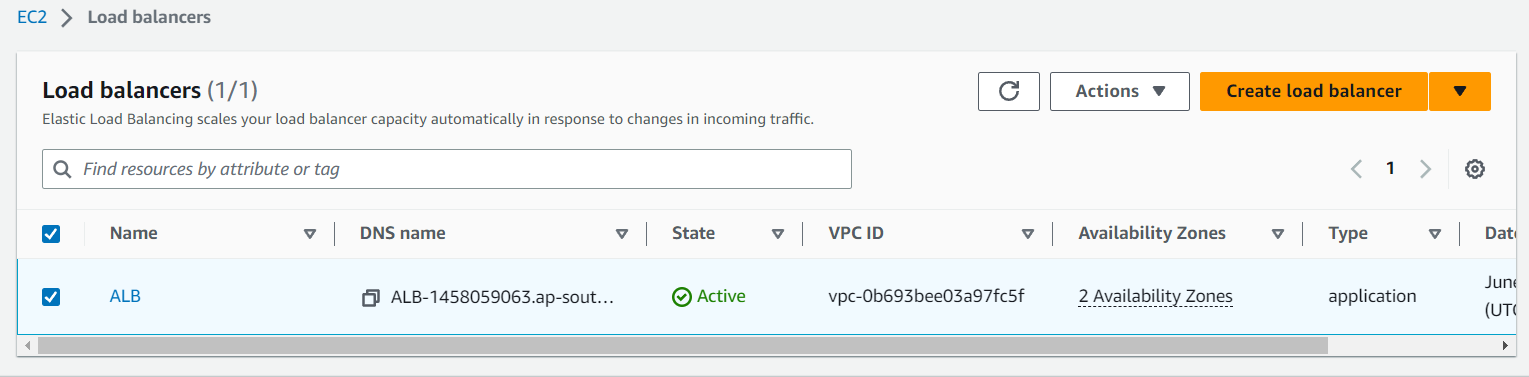
**\*\*With the help of CLB-DNS we can see the check it is controlling the traffic:  
**

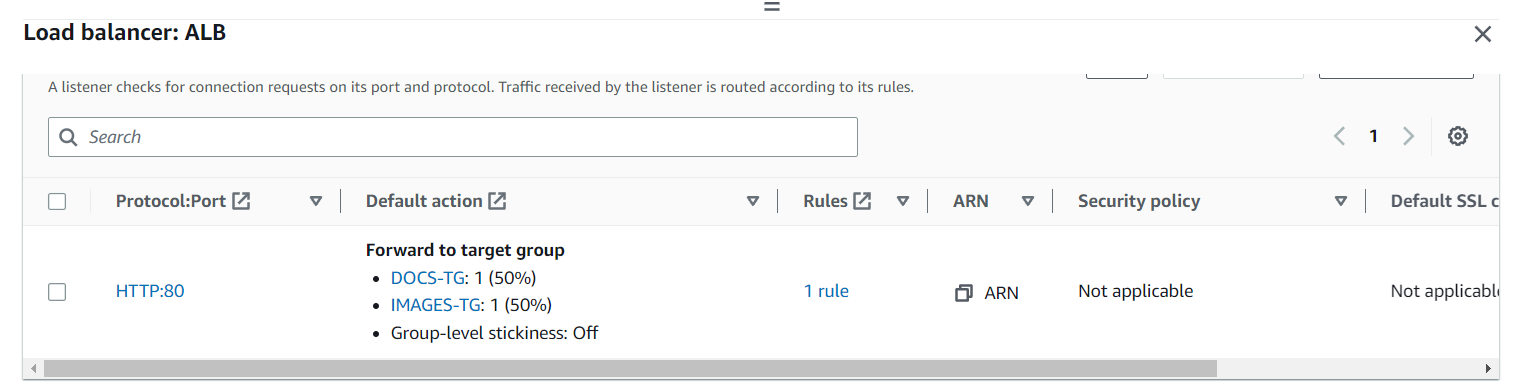
****

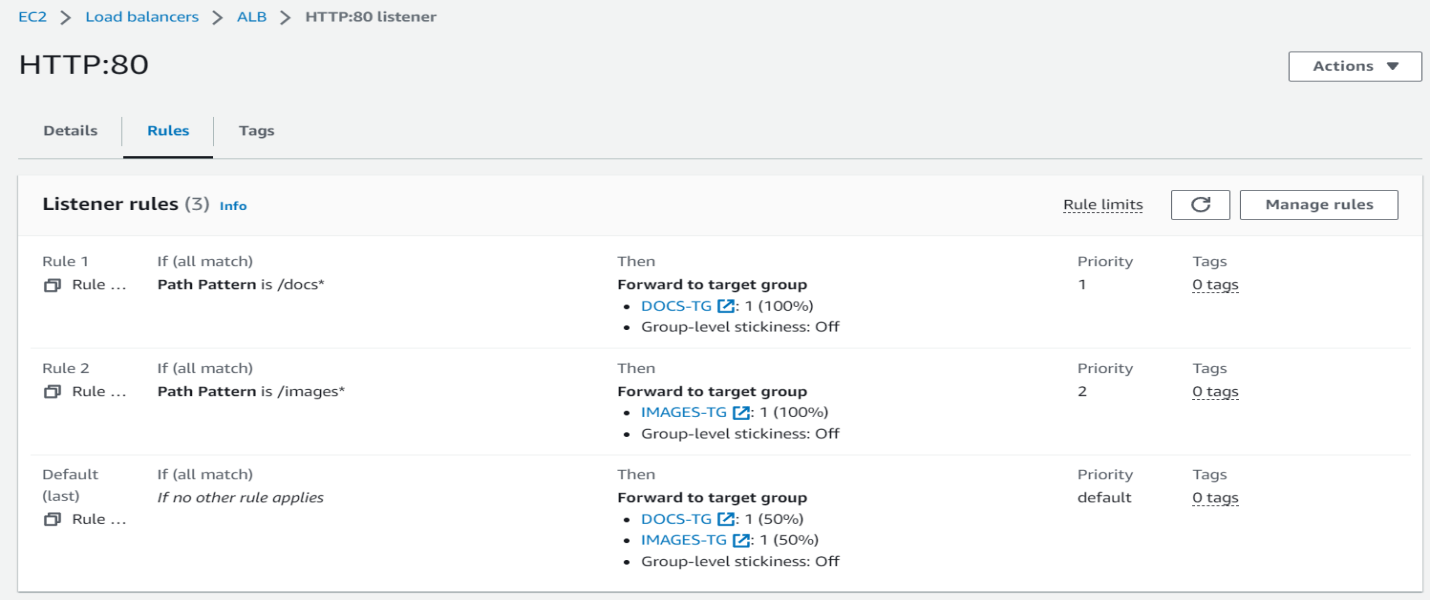
**3. Configure Application Load balancer**

* **We have to use prefix for verifying the ALB**
* **We have to create TARGET GROUP with proper configuration and also we can increase the health check status time by “200-499”**
* **After creating TG we have to connect the TG with the ALB**
* **In the listeners we are adding the port and rules to perform the ALB**

****

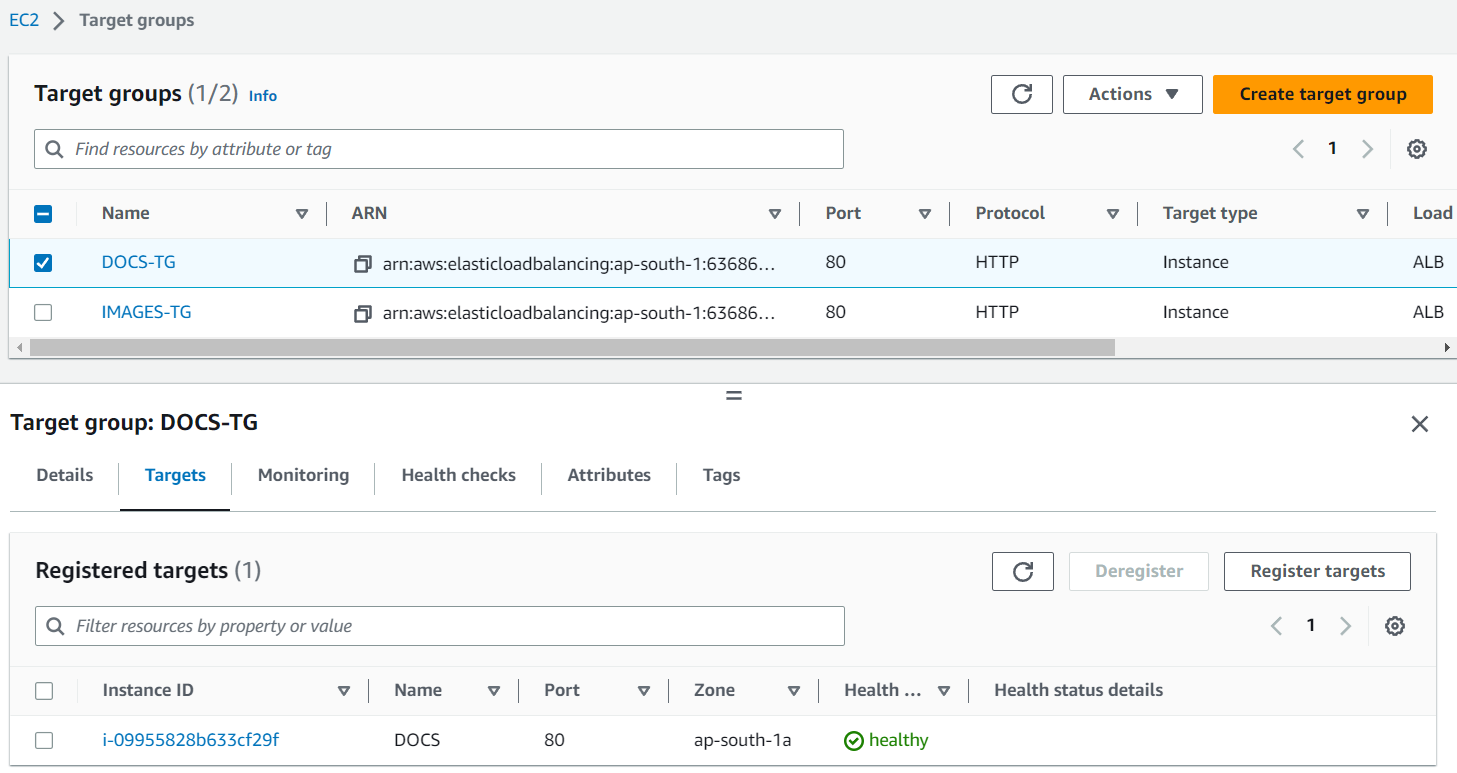
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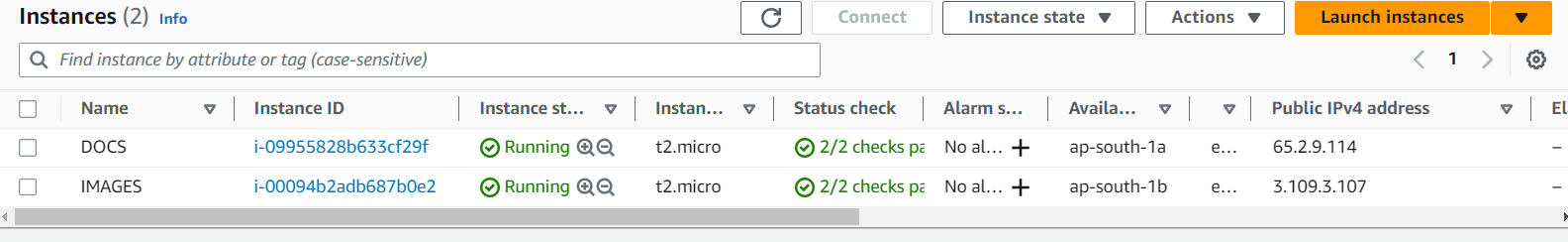
**TARGET GROUP**

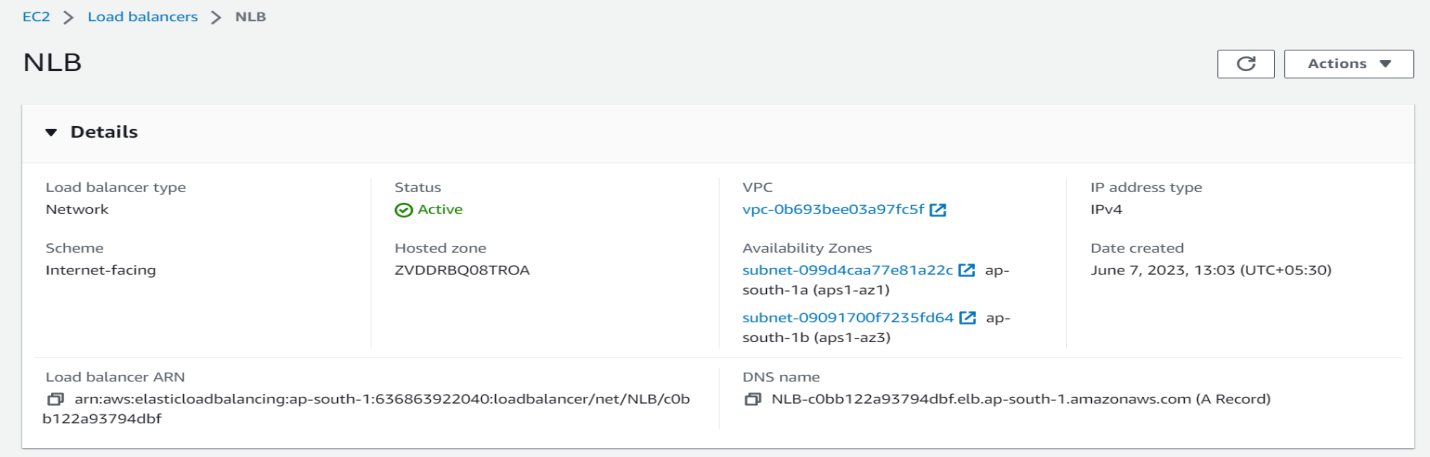
**“A target group tells a load balancer where to direct traffic to : EC2 instances, fixed IP addresses, When creating a load balancer, you create one or more**[**listeners**](https://docs.aws.amazon.com/en_pv/elasticloadbalancing/latest/application/load-balancer-listeners.html)**and configure**[**listener rules**](https://docs.aws.amazon.com/en_pv/elasticloadbalancing/latest/application/listener-update-rules.html)**to direct the traffic to one target group.”**

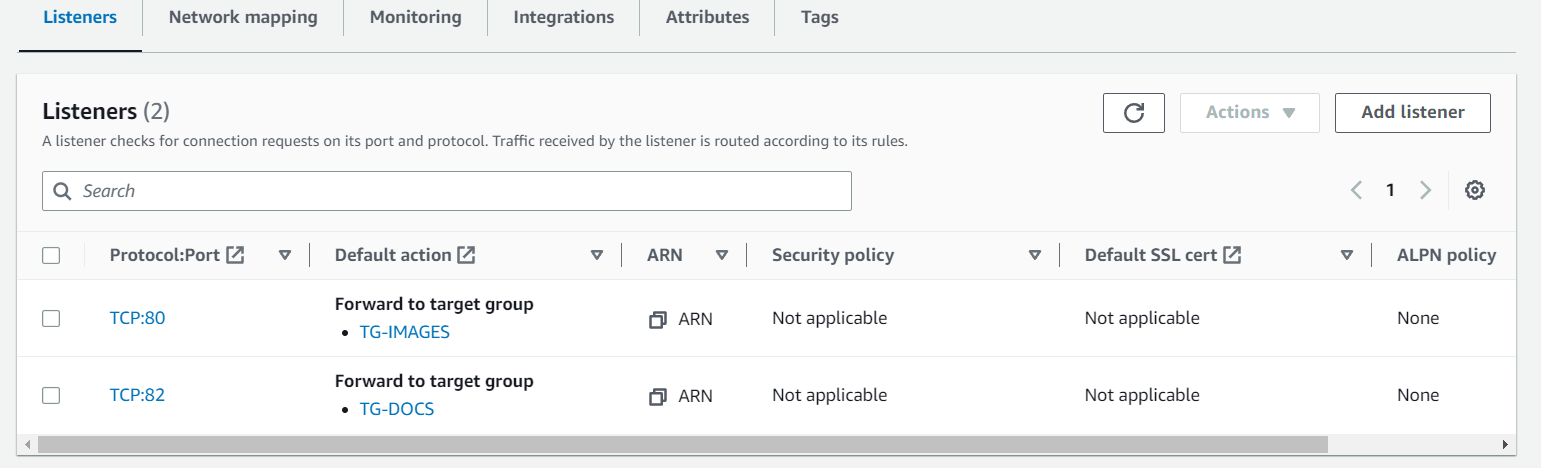
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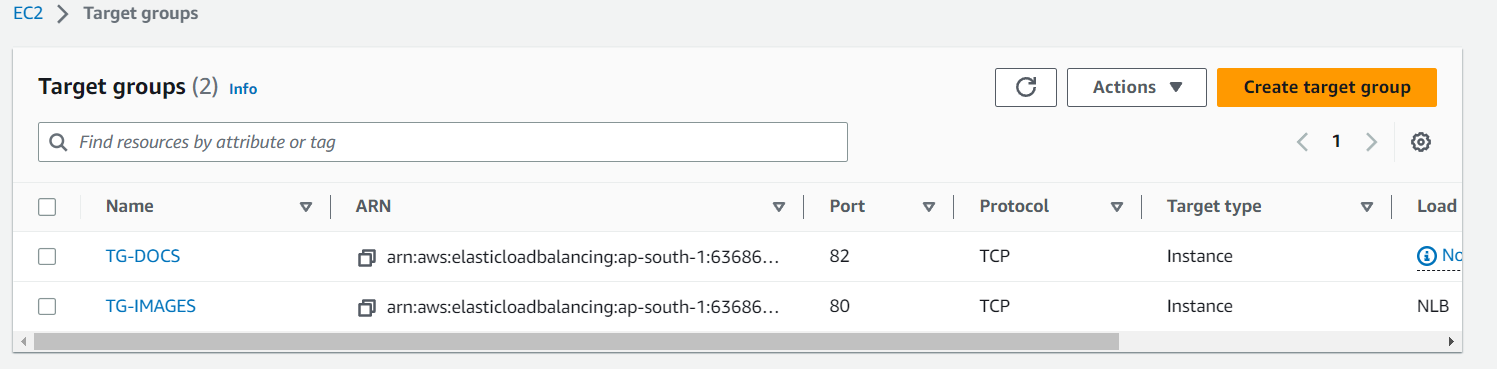
**4. Configure NETWORK Load balancer**

* **It only works on TCP and UDP(53) NETWORK PROTOCOL**
* **So we have to change the port of instances/Target Group with TCP and UDP**

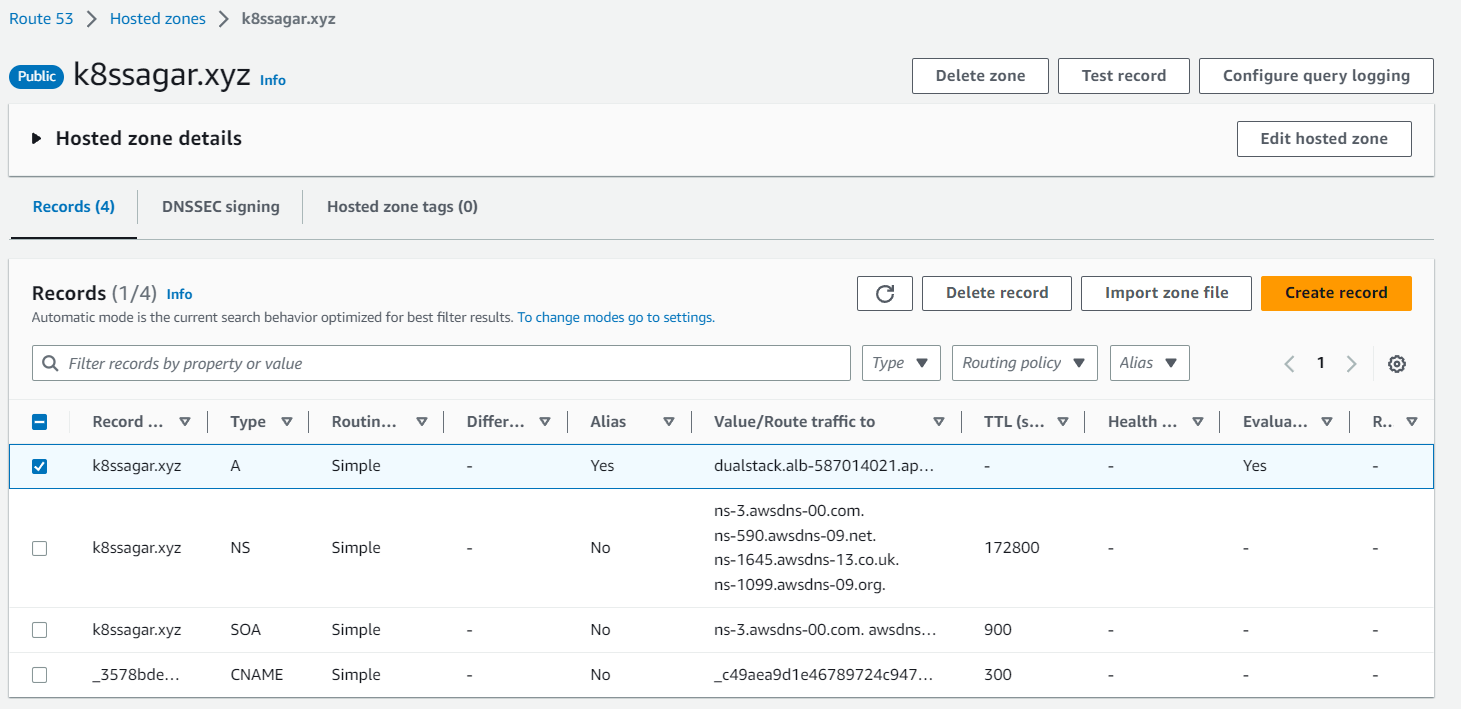
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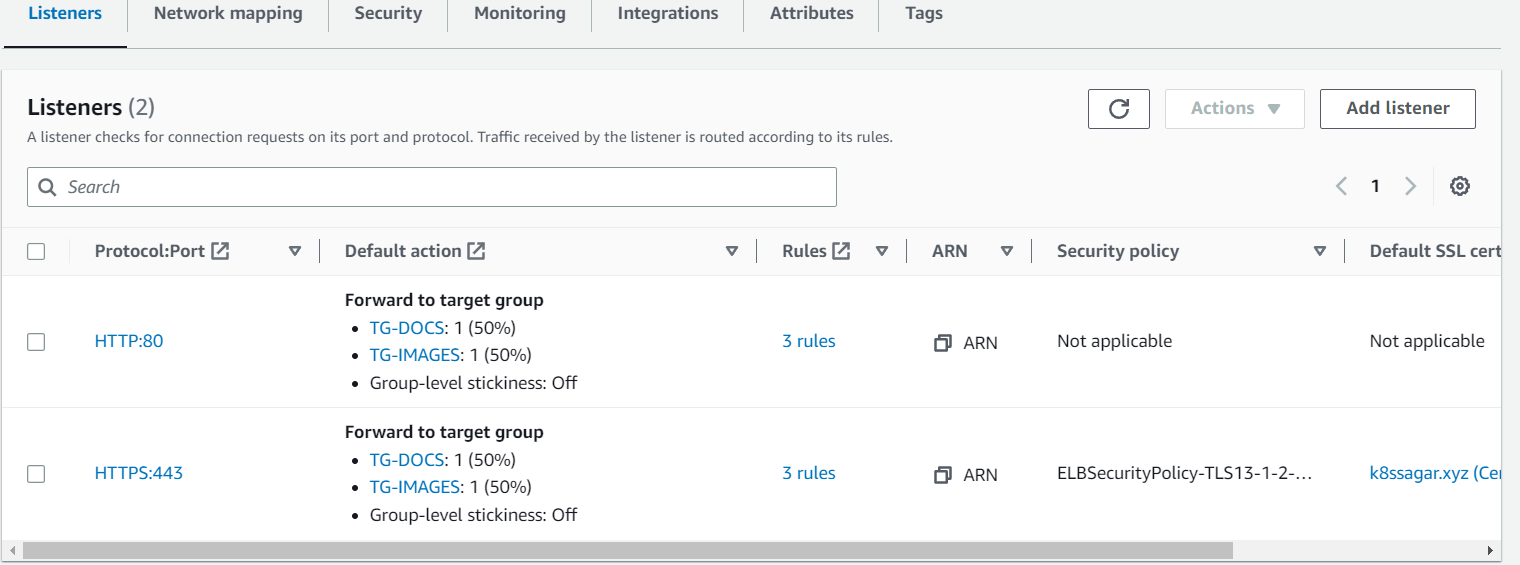
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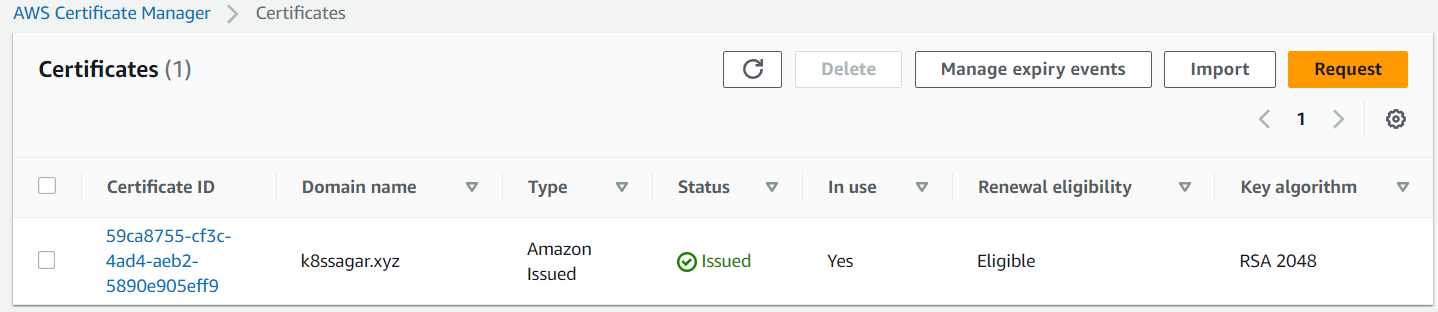
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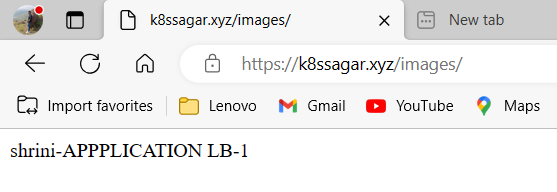
****

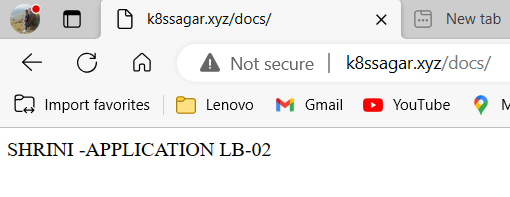
**5. Map any one Load balancer with R53 and also attach ssl certificate to Load balancer.**

****

**DOMAIN NAME : k8ssagar.xyz /we have to add the HTTPS listeners to ALB   
**

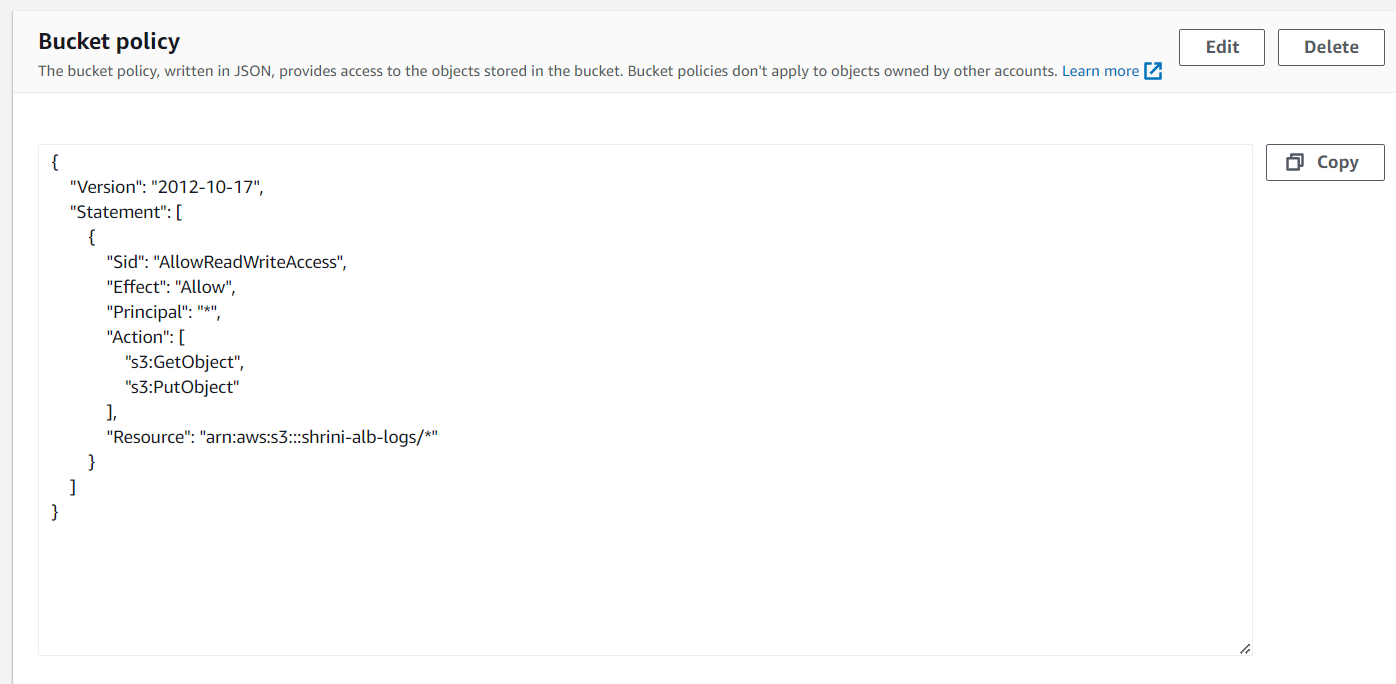
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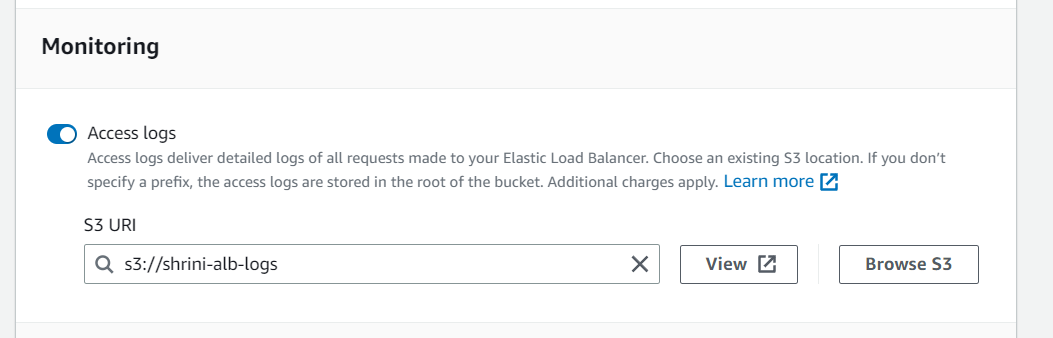
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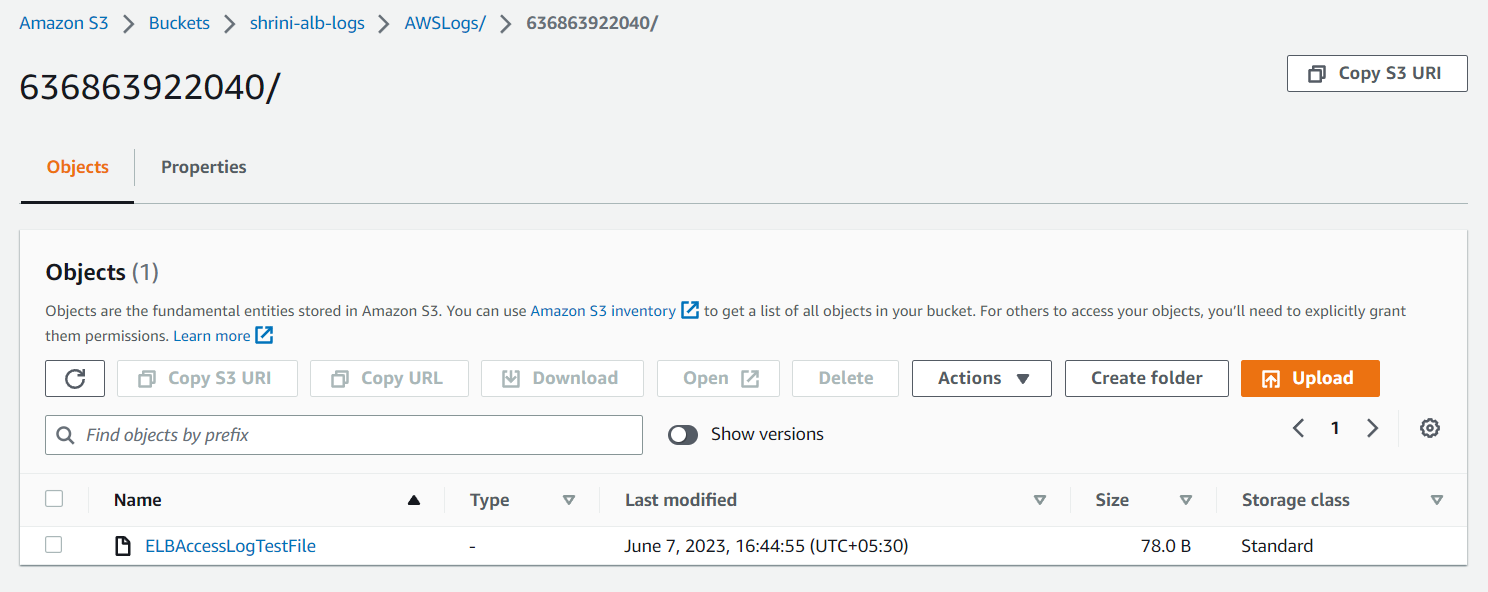
****

**6. Push application load balancer logs to s3 bucket.**

**FIRST GIVE A POLICY TO THE BUCKET AS GIVEN BELOW:-**

****

**THEN ON THE ATTRIBUTES OF YOUR “LB” JUST GIVE THE PERMISSION OF MONITORING ACESS LOG WITH THE GIVEN BUCKET URI  
**

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**------------------------------------------------------------------------------------**