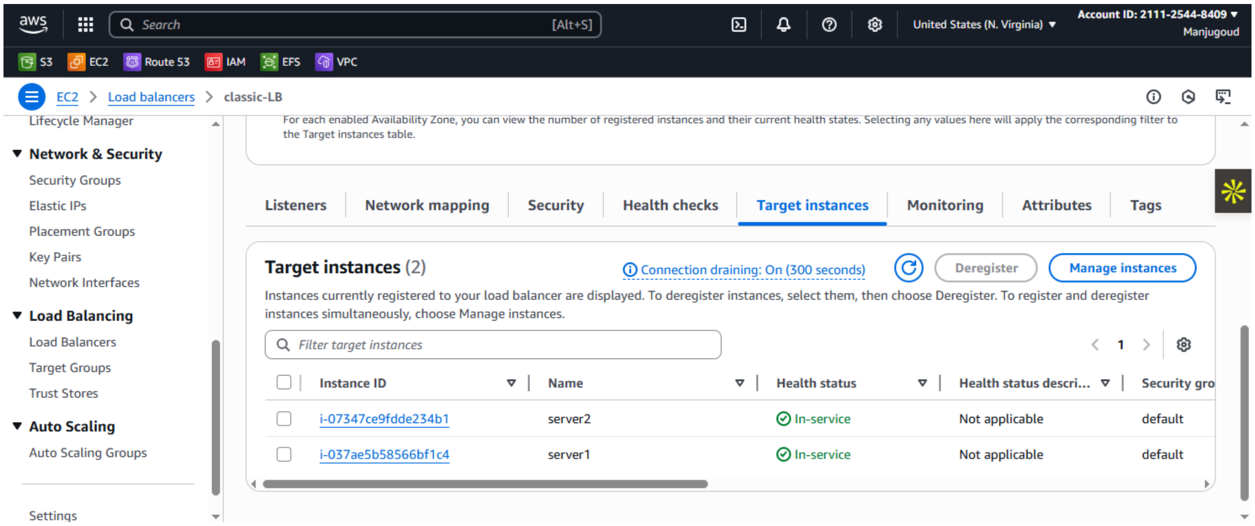
Task on Load balancers.

1) Configure Classic Load balancer.

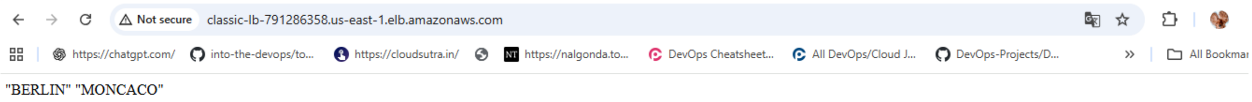


For each enabled Availability Zone, you can view the number of registered instances and their current health states. Selecting any values here will apply the corresponding filter to the Target instances table.

Target instances (2)

Instances currently registered to your load balancer are displayed. To deregister instances, select them, then choose Deregister. To register and deregister instances simultaneously, choose Manage instances.

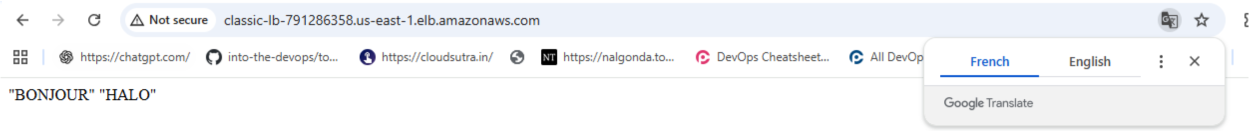
□	Instance ID	Name	Health status	Health status descri...	Security gro
□	i-07347ce9fdde234b1	server2	✓ In-service	Not applicable	default
□	i-037ae5b58566bf1c4	server1	✓ In-service	Not applicable	default



classic-lb-791286358.us-east-1.elb.amazonaws.com

"BERLIN" "MONCACO"

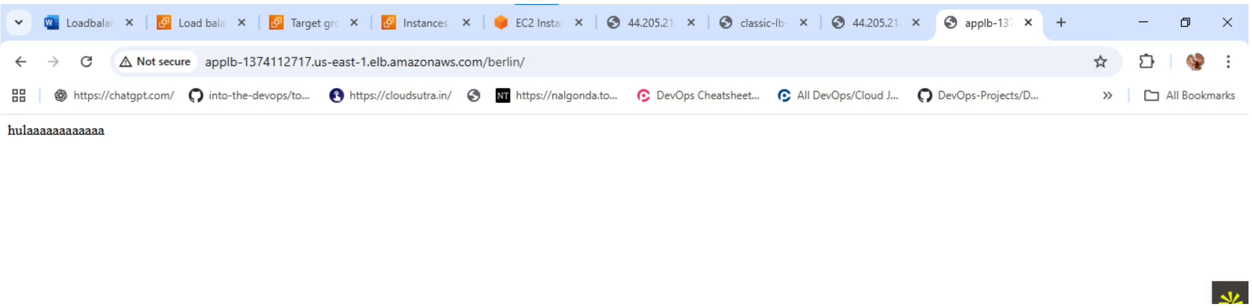
To create ClassicLB we need to create two instances with instaling httpd and give index.html files later we need to create classic LB and create TargetGroup by choosing the instance setting and giving (/ path) to redirect to that page.Next we need to add the TG in ClassicLB and next we need to create Target Instances by adding instances to the LB and add Listener rule of http,tcp..later create ClassicLB.and Test in Browser by pasting the DNS url in the browser.



classic-lb-791286358.us-east-1.elb.amazonaws.com

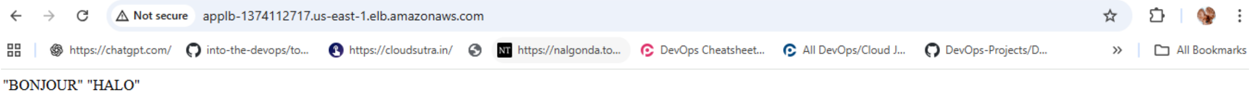
"BONJOUR" "HALO"

2) Configure Application Load balancer.



Not secure applb-1374112717.us-east-1.elb.amazonaws.com/berlin/

hulaaaaaaaaaaaa



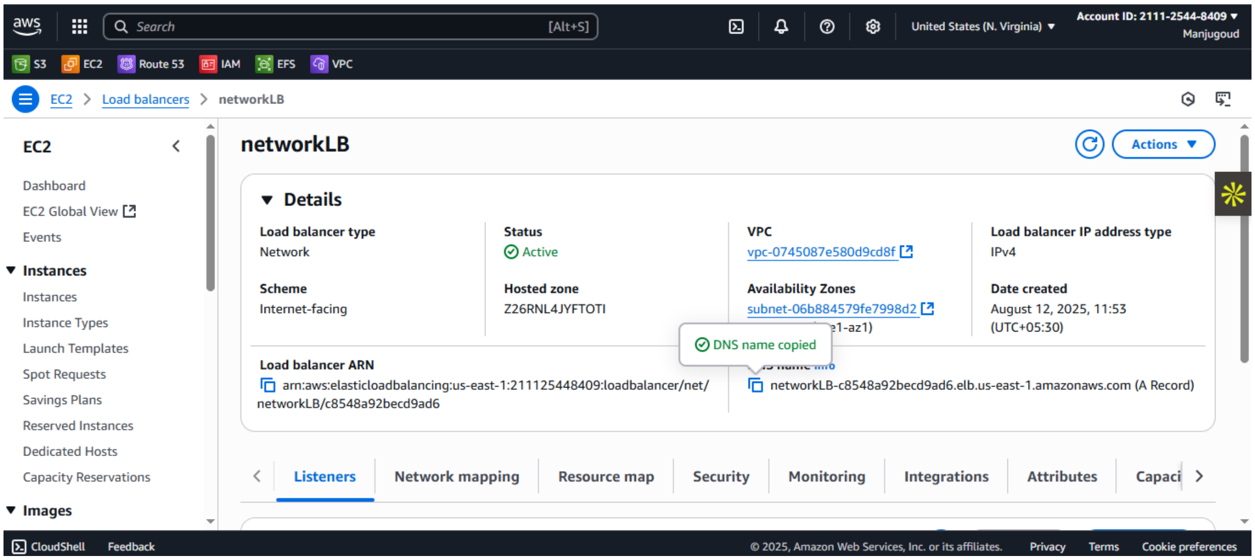
Not secure applb-1374112717.us-east-1.elb.amazonaws.com

"BONJOUR" "HALO"

1. Clients make requests to your application.
2. The listeners in your load balancer receive requests matching the protocol and port that you configure.
3. The receiving listener evaluates the incoming request against the rules you specify, and if applicable, routes the request to the appropriate target group. You can use an HTTPS listener to offload the work of TLS encryption and decryption to your load balancer.
4. Healthy targets in one or more target groups receive traffic based on the load balancing algorithm, and the routing rules you specify in the listener

Here we can create Path based routing which re-directs the page to another index.html file which we saved in that particular path or Directory.

3) Configure Network Load balancer.



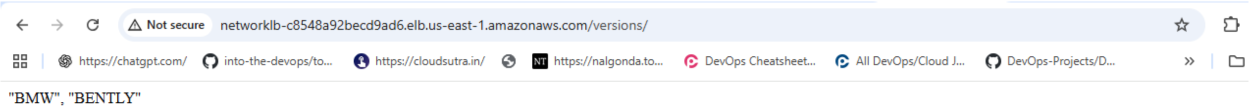
EC2 > Load balancers > networkLB

networkLB

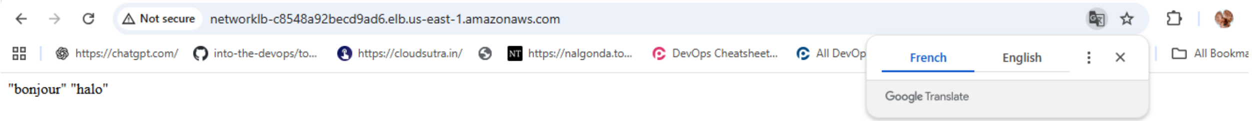
Details

Load balancer type: Network
Status: Active
VPC: vpc-0745087e580d9cd8f
Load balancer IP address type: IPv4
Scheme: Internet-facing
Hosted zone: Z26RNL4JYFTOTI
Availability Zones: subnet-06b884579fe7998d2 ...1-az1)
Date created: August 12, 2025, 11:53 (UTC+05:30)
Load balancer ARN: arn:aws:elasticloadbalancing:us-east-1:211125448409:loadbalancer/net/networkLB/c8548a92becd9ad6
DNS name: networkLB-c8548a92becd9ad6.elb.us-east-1.amazonaws.com (A Record)

DNS name copied



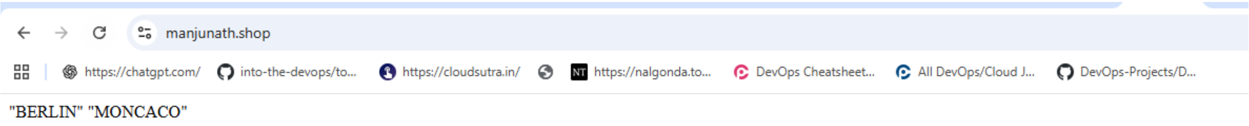
"BMW", "BENTLY"



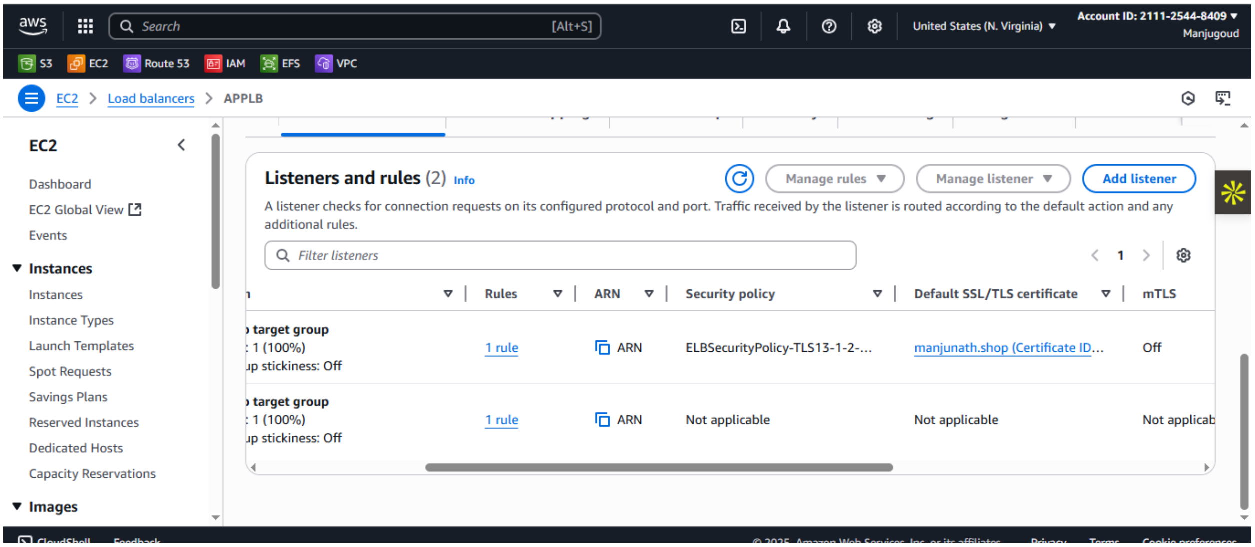
"bonjour" "halo"

To create NetworkLB we need to create two instances with installing httpd and give index.html files later we need to create classic LB and create TargetGroup by choosing the instance setting and giving (/ path) to redirect to that page.Next we need to add the TG in ClassicLB and next we need to create Target Instances by adding instances to the LB and add Listener rule of http, tcp..later create ClassicLB and Test in Browser by pasting the DNS url in the browser.

4) Attach SSL for application load balancer.



"BERLIN" "MONCACO"



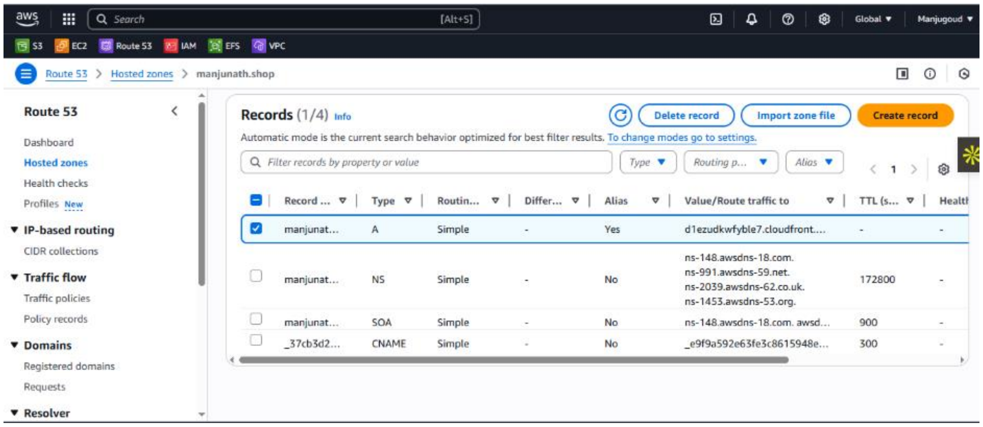
Listeners and rules (2) Info

A listener checks for connection requests on its configured protocol and port. Traffic received by the listener is routed according to the default action and any additional rules.

n	Rules	ARN	Security policy	Default SSL/TLS certificate	mTLS
target group : 1 (100%) up stickiness: Off	1 rule	ARN	ELBSecurityPolicy-TLS13-1-2-...	manjunath.shop (Certificate ID...	Off
target group : 1 (100%) up stickiness: Off	1 rule	ARN	Not applicable	Not applicable	Not applicab

Here in the Application LB we need to create 1 instane and create a APPLication LB and add VPC and create TargetGroup for that LB, and add “HTTP:80” ListenerRule ,Next we need to create a ACM(request certificate) ,nxt create Route53 and configure the ACM(cert)in the ROUTE53 by addng CNAME and next add “A” type record with alias to applictionLB and paste the url of DNS of applictnLB and create Record.after issuing we need need to add in the Listeners rule by selecting “HTTPS:443 ”add the certificate and create Loadbalancer.

5) Map Application load balancer to R53.

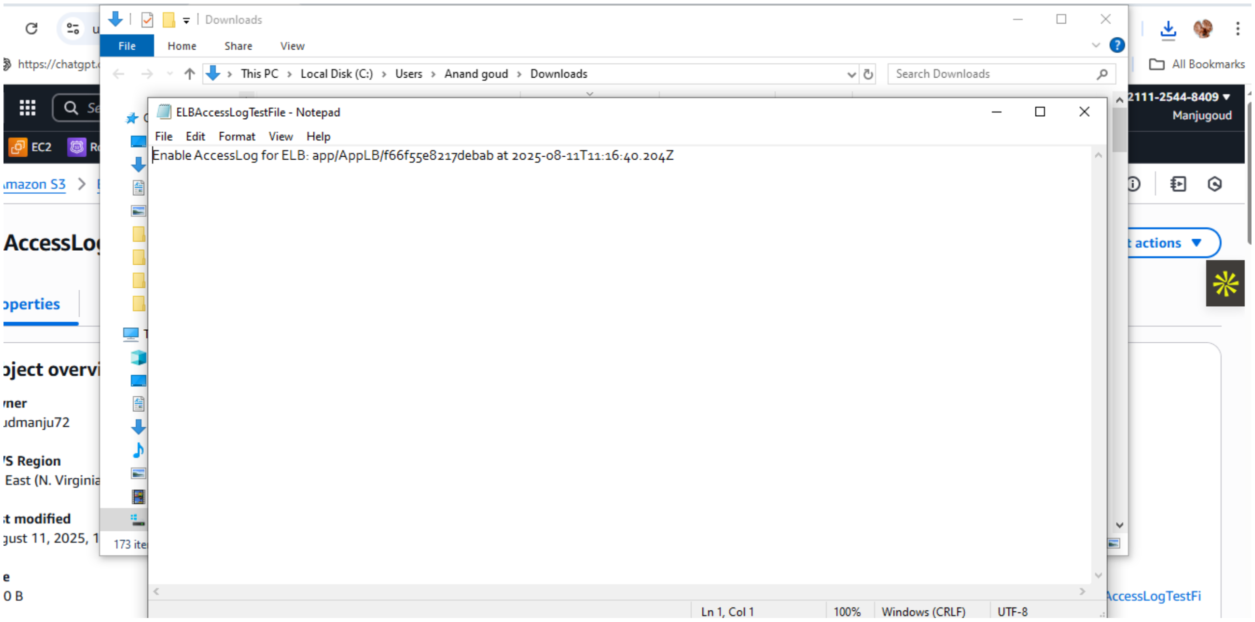


Records (1/4) Info

Automatic mode is the current search behavior optimized for best filter results. To change modes go to settings.

	Record ...	Type	Routin...	Differ...	Alias	Value/Route traffic to	TTL (s...	Healt
☑	manjunat...	A	Simple	-	Yes	d1ezudkwfyble7.cloudfront....	-	-
□	manjunat...	NS	Simple	-	No	ns-148.awsdns-18.com. ns-991.awsdns-59.net. ns-2039.awsdns-62.co.uk. ns-1453.awsdns-53.org.	172800	-
□	manjunat...	SOA	Simple	-	No	ns-148.awsdns-18.com. awsd...	900	-
□	_37cb3d2...	CNAME	Simple	-	No	_e9f9a592e63fe3c8615948e...	300	-

6) Push the application load balancer logs to s3



```
Enable AccessLog for ELB: app/AppLB/f66f55e8217debab at 2025-08-11T11:16:40.204Z
```

Here we need to create a Loadbalancer and ec2-instance and attach them to Loadbalancer and later you need to go to attributes in Load-balancer and in the last line you will find access logs we need to enable and select S3 and select the created bucket. For that we need to create a bucket with the policy.

```
{
 "Version": "2012-10-17",
 "Id": "ALBAccessLogsPolicy",
 "Statement": [
  {
   "Sid": "AWSALBLogsPolicy",
   "Effect": "Allow",
   "Principal": {
    "Service": "logdelivery.elasticloadbalancing.amazonaws.com"
   },
   "Action": "s3:PutObject",
   "Resource": "arn:aws:s3:::<your-bucket-name>/AWSLogs/<your-account-id>/*"
  }
 ]
}
```

After creating the bucket we need wait for couple of minutes to get the logs in S3.