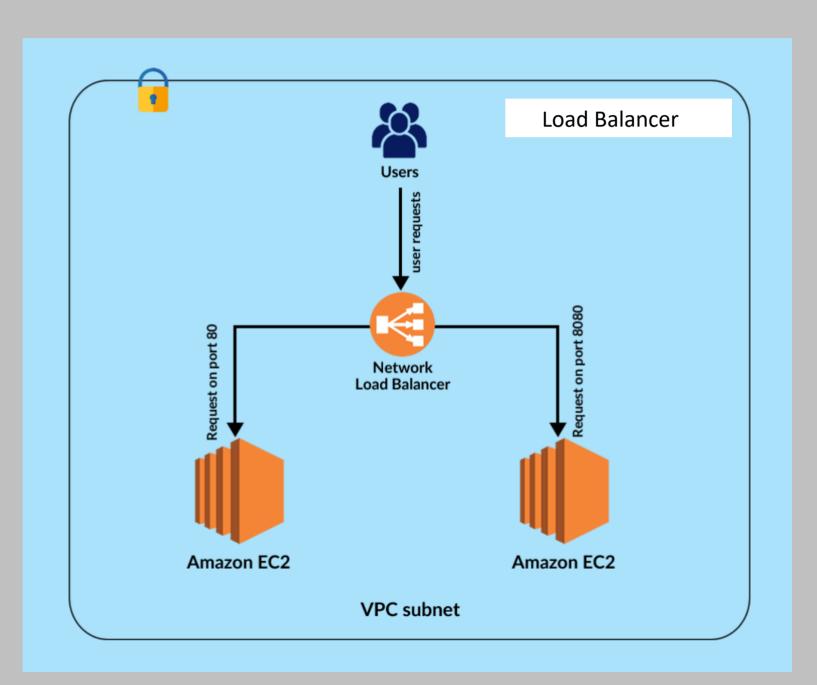
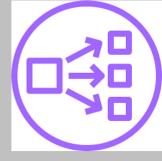


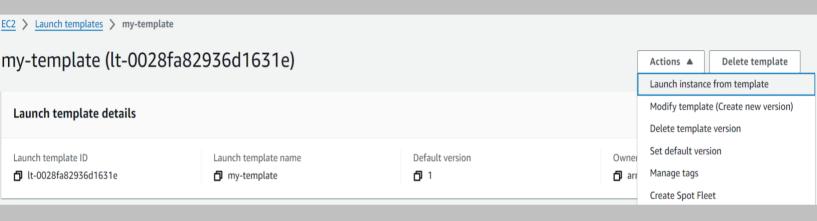
# **Architecture of Network Load Balancer**



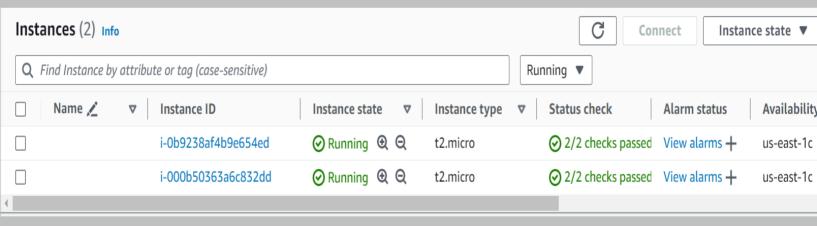
## **AWS Network Load Balancer**



Launch instance from template :-



Created instances from template :-





Dualstack

Includes IPv4 and IPv6 addresses.

1. Do some basic configuration, as shown below

EC2 > Load balancers > Create Network Load Balancer Create Network Load Balancer Info The Network Load Balancer distributes incoming TCP and UDP traffic across multiple targets such as Amazon EC2 instances, mi balancer receives a connection request, it selects a target based on the protocol and port that are specified in the listener confidence. the default action. How Network Load Balancers work **Basic configuration** Load balancer name Name must be unique withir your AWS account and can't be changed after the load balancer is created. NLB A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen. Scheme Scheme can't be changed after the load balancer is created. Internet-facing An internet-facing load balancer routes requests from clients over the internet to targets. Requires a public subnet. Learn more [2] Internal An internal load balancer routes requests from clients to targets using private IP addresses. IP address type | Info ect the type of IP addresses that your subnets use. IPv4 Includes only IPv4 addresses.

### 2. Configure Network

# Network mapping Info The load balancer routes traffic to targets in the selected subnets, and in accordance with your IP address settings. **VPC** the load balancer is created. To confirm the VPC for your targets, view your target groups . vpc-011b02a54642adb6e IPv4 VPC CIDR: 172.31.0.0/16 Mappings Select at least one Availability Zone and one subnet for each zone. We recommend selecting at least two Availability Zones. The load balancer will route traff Availability Zones. Zones that are not supported by the load balancer or VPC can't be selected. Subnets can be added, but not removed, once a load balancer us-east-1a (use1-az6) us-east-1b (use1-az1) Subnet subnet-0ca782532db629901 IPv4 address Assigned by AWS us-east-1c (use1-az2) Subnet subnet-07d4bba6419602002 IPv4 address Assigned by AWS

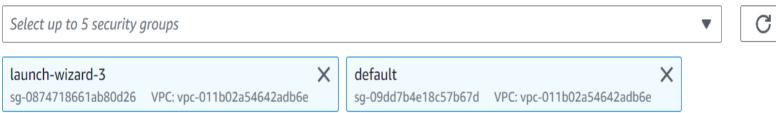
3. Add Security group that conatin HTTP(S) 80/tcp port

#### Security groups Info

A security group is a set of firewall rules that control the traffic to your load balancer. Select an existing security group, or you can create a new security group

#### Security groups - recommended

Security groups support on Network Load Balancers can only be enabled at creation by including at least one security group. You can change security groups a for your load balancer must allow it to communicate with registered targets on both the listener port and the health check port. For PrivateLink Network Load are enforced on PrivateLink traffic; however, you can turn off inbound rule evaluation after creation within the load balancer's Security tab or using the API.



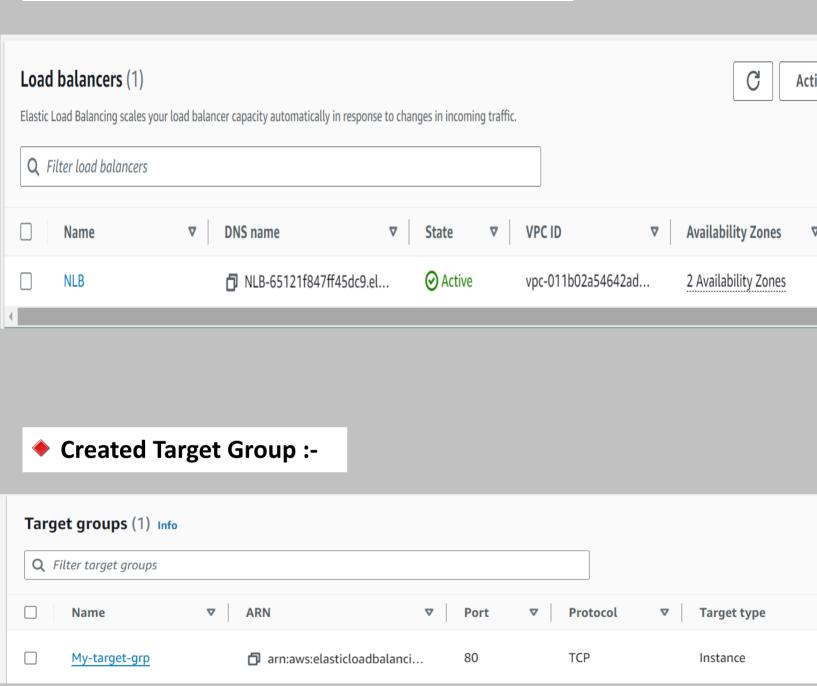
4. Attach or create Target Group To Network Load Balancer (NLB)

Note:- While creating Target Group, select TCP Protocol that

used with Network Load Balancer.

# Listeners and routing Info A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer routes requests to its registered targets. ▼ Listener TCP:80 Protocol Port Default action Info TCP ▼ : 80 I-65535 TCP Target type: Instance, IPv4 Create target group [7]

# ♦ Network Load Balancer Create successfully :-



Access web page on browser using DNS of Load Balancer to test NLB :-

If you try to refresh the page, it will stick to one instance because the Round Robin (RR) algorithm does not work in NLB.





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