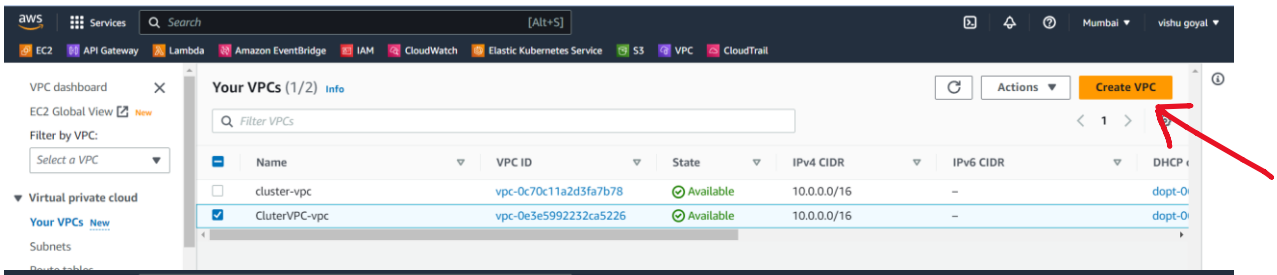
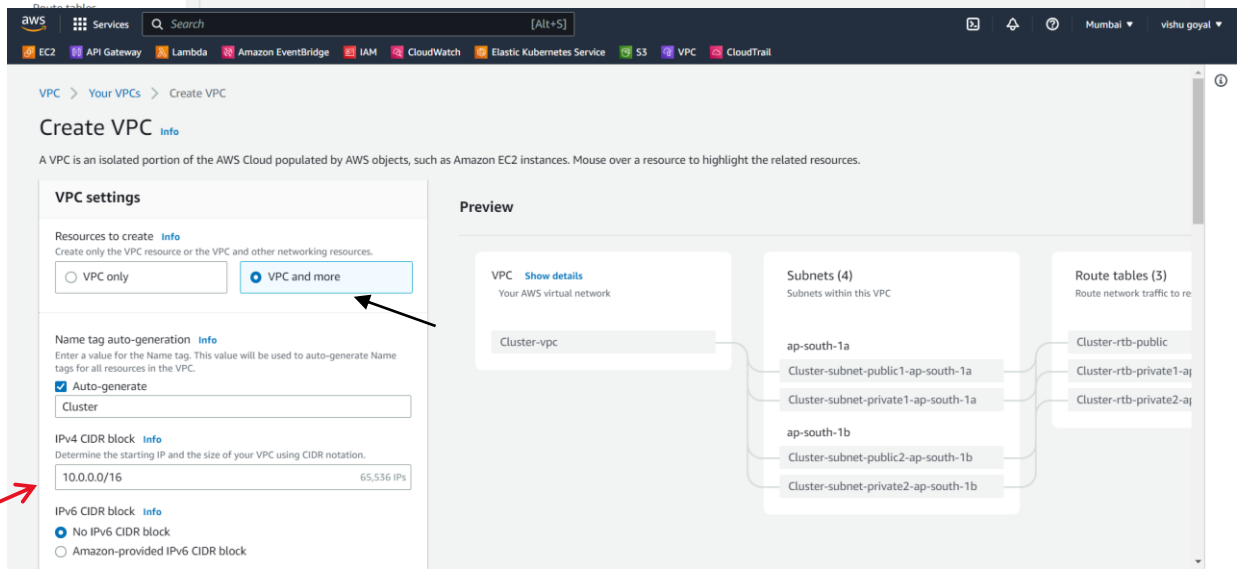
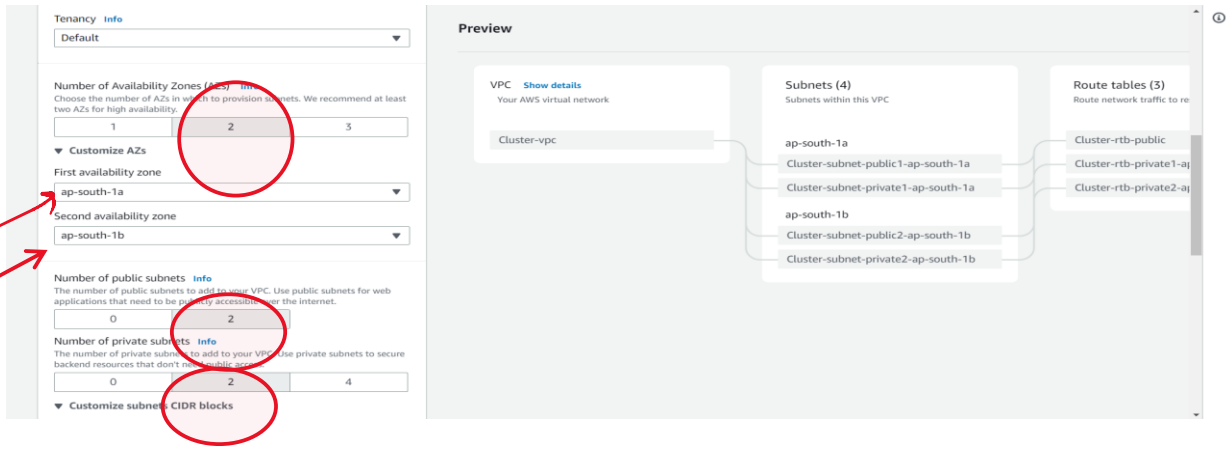
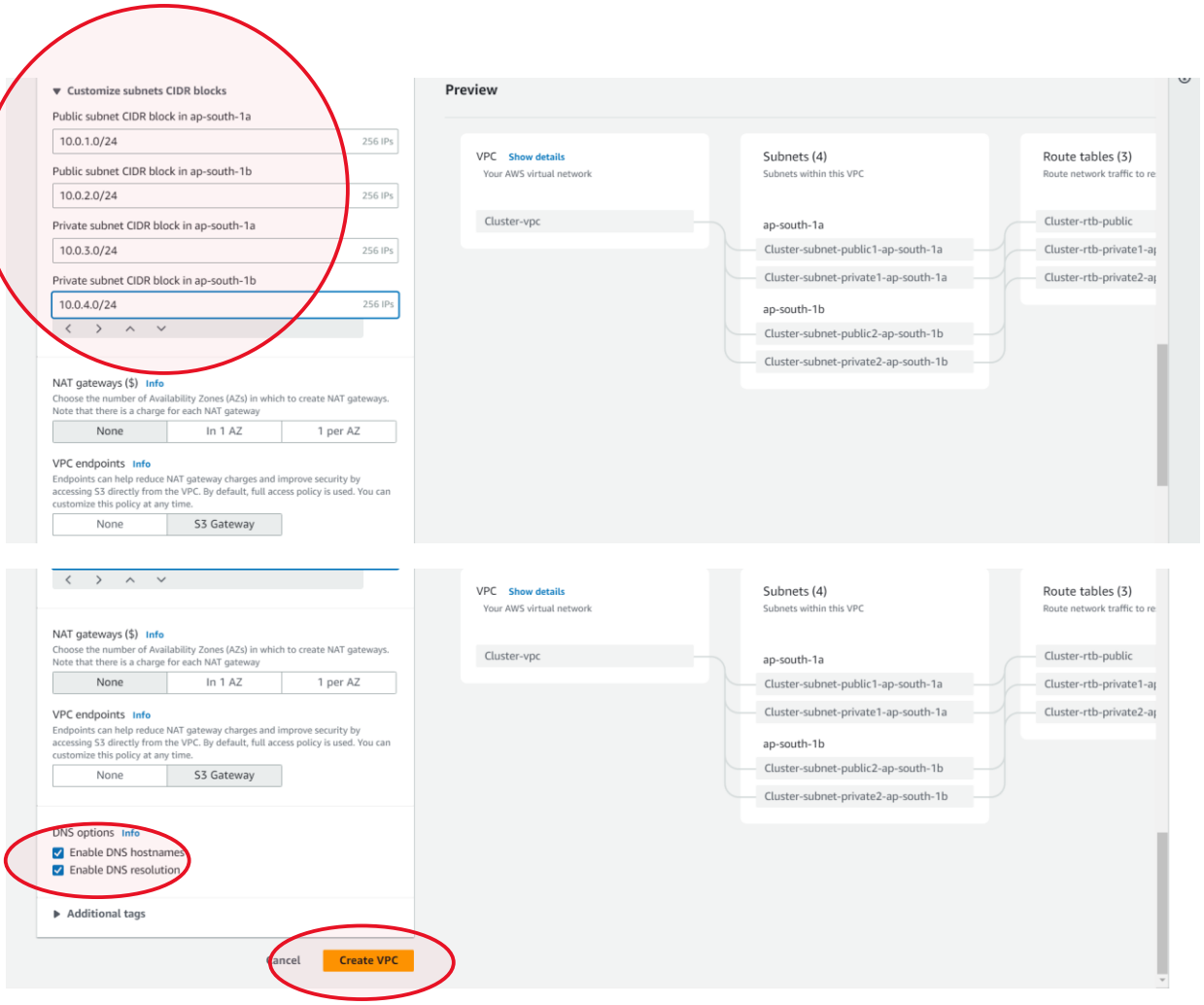
Create a Load Balancer with 2 private Nodes!

Step 1: Firstly, create a custom VPC.

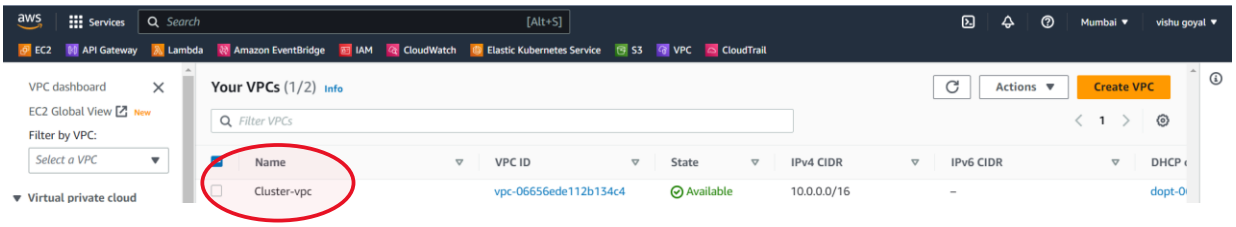




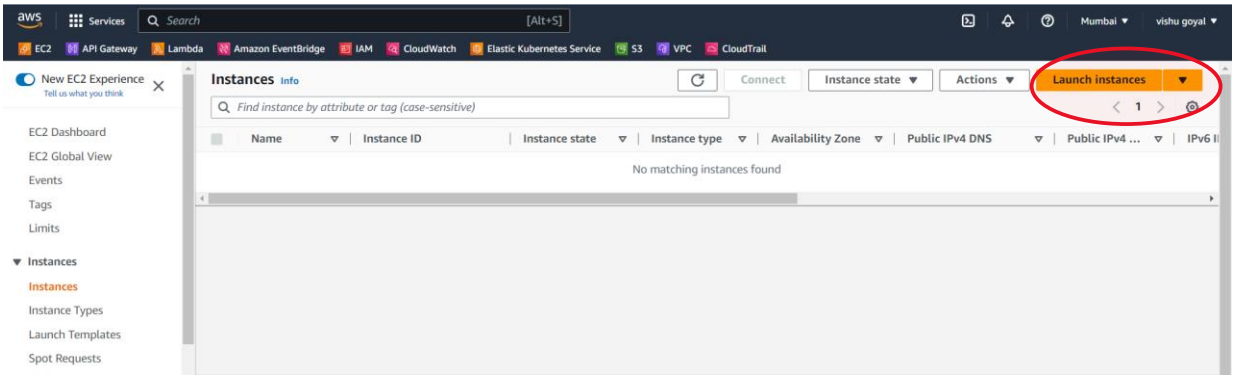


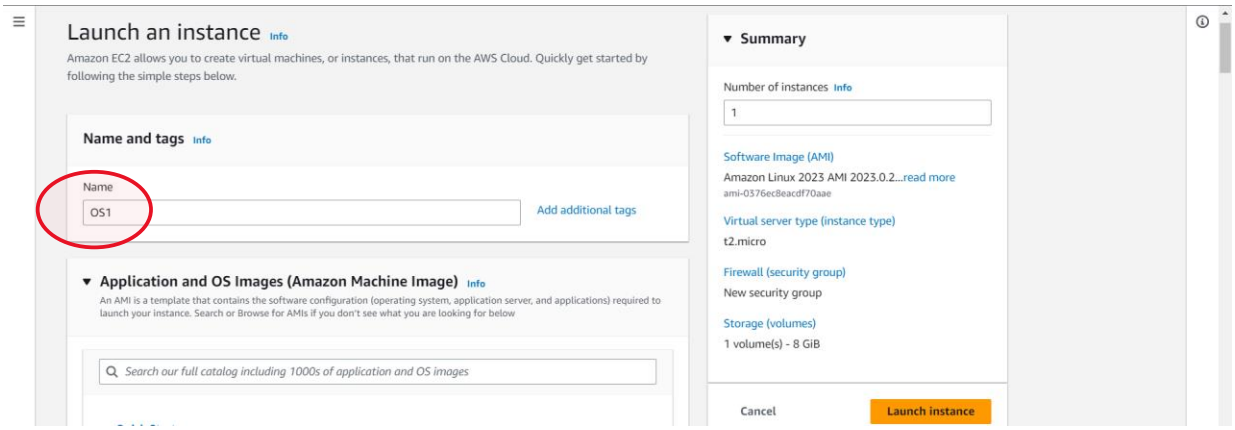


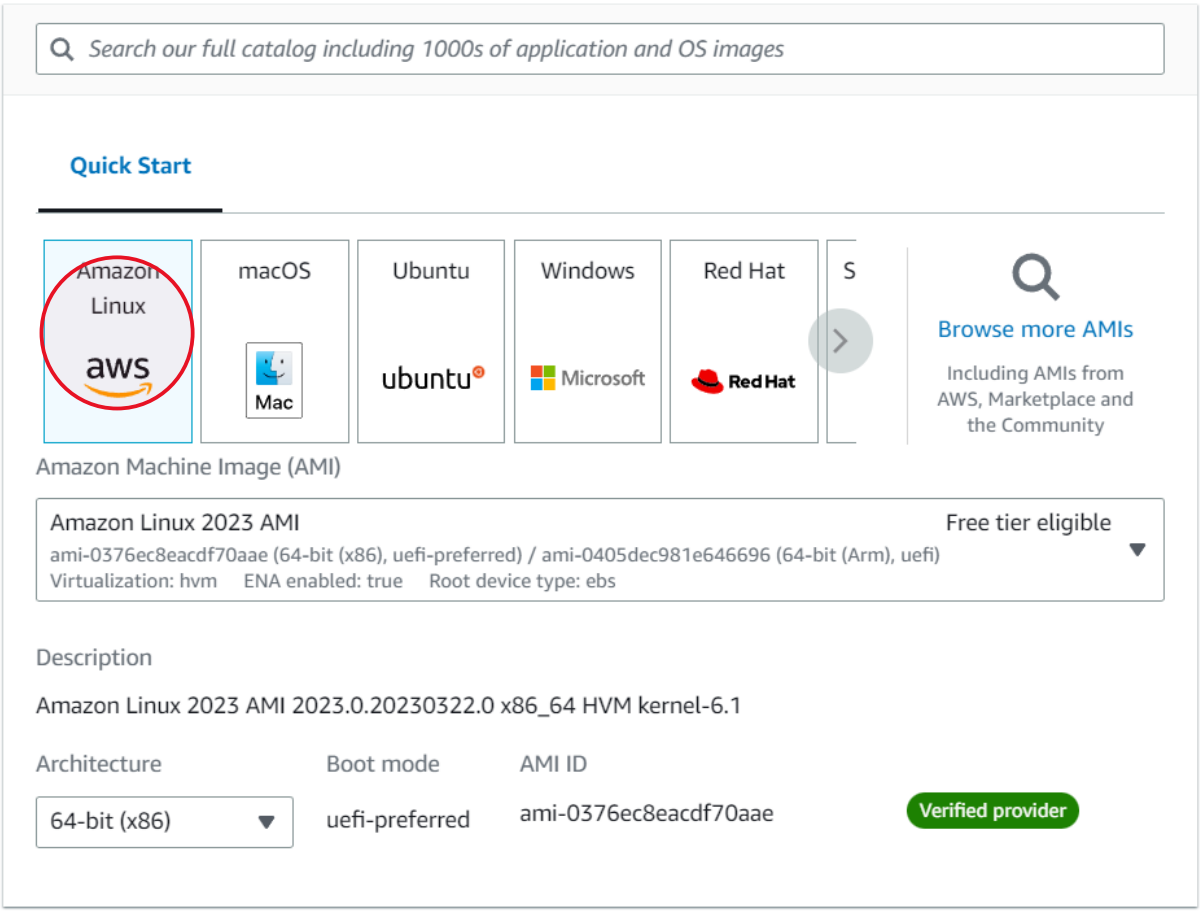
After all this, you can see this cluster-vpc

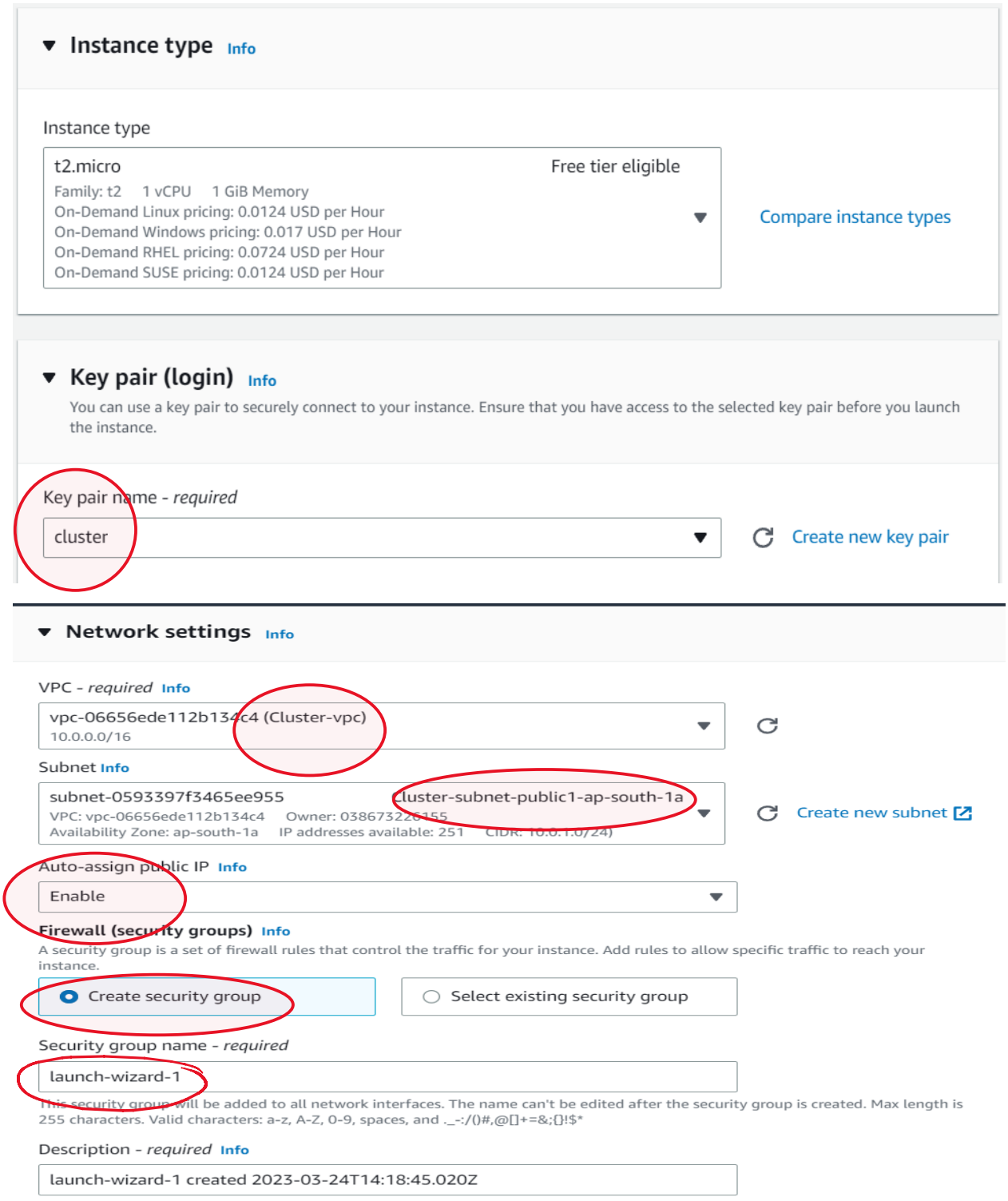


Step2 : Launch 2 instance with apache setup




Launch an instance Info
Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.
Name and tags Info
Name
OS1
Add additional tags
Application and OS Images (Amazon Machine Image) Info
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below
Search our full catalog including 1000s of application and OS images
Summary
Number of instances Info
1
Software Image (AMI)
Amazon Linux 2023 AMI 2023.0.2...read more
ami-0376ec8eacdf70aae
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Cancel
Launch instance


Search our full catalog including 1000s of application and OS images
Quick Start
Amazon Linux
aws
macOS
Mac
Ubuntu
ubuntu
Windows
Microsoft
Red Hat
Red Hat
S
Browse more AMIs
Including AMIs from AWS, Marketplace and the Community
Amazon Machine Image (AMI)
Amazon Linux 2023 AMI
Free tier eligible
ami-0376ec8eacdf70aae (64-bit (x86), uefi-preferred) / ami-0405dec981e646696 (64-bit (Arm), uefi)
Virtualization: hvm ENA enabled: true Root device type: ebs
Description
Amazon Linux 2023 AMI 2023.0.20230322.0 x86_64 HVM kernel-6.1
Architecture
Boot mode
AMI ID
64-bit (x86)
uefi-preferred
ami-0376ec8eacdf70aae
Verified provider



Instance type Info

Instance type

t2.micro — Free tier eligible

Family: t2 1 vCPU 1 GiB Memory
On-Demand Linux pricing: 0.0124 USD per Hour
On-Demand Windows pricing: 0.017 USD per Hour
On-Demand RHEL pricing: 0.0724 USD per Hour
On-Demand SUSE pricing: 0.0124 USD per Hour

Compare instance types

Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

cluster

Create new key pair

Network settings Info

VPC - *required* Info

vpc-06656ede112b134c4 (Cluster-vpc)
10.0.0.0/16

Subnet Info

subnet-0593397f3465ee955 cluster-subnet-public1-ap-south-1a
VPC: vpc-06656ede112b134c4 Owner: 038673226155
Availability Zone: ap-south-1a IP addresses available: 251 CIDR: 10.0.1.0/24)

Create new subnet

Auto-assign public IP Info

Enable

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group

Select existing security group

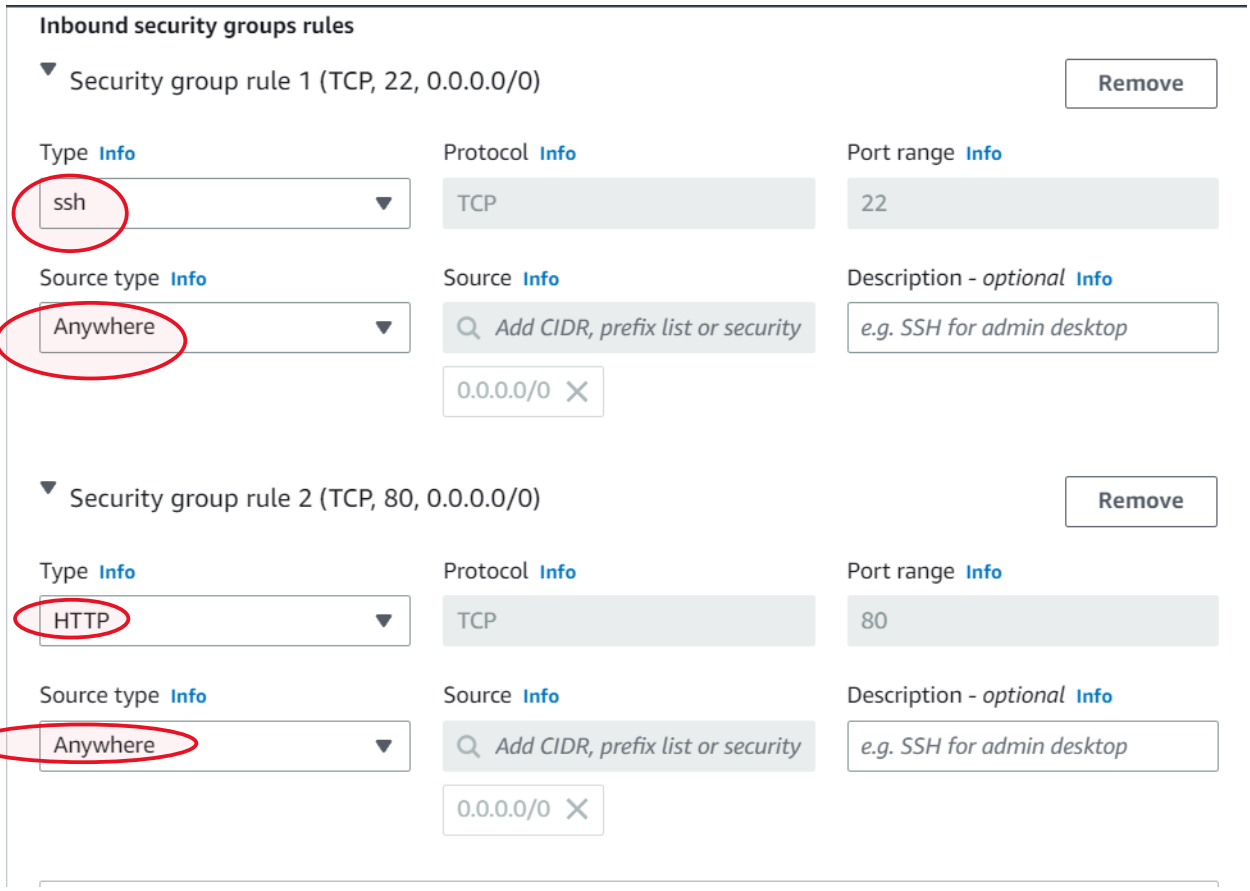
Security group name - *required*

launch-wizard-1

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#,@[]+=&;{}!$*

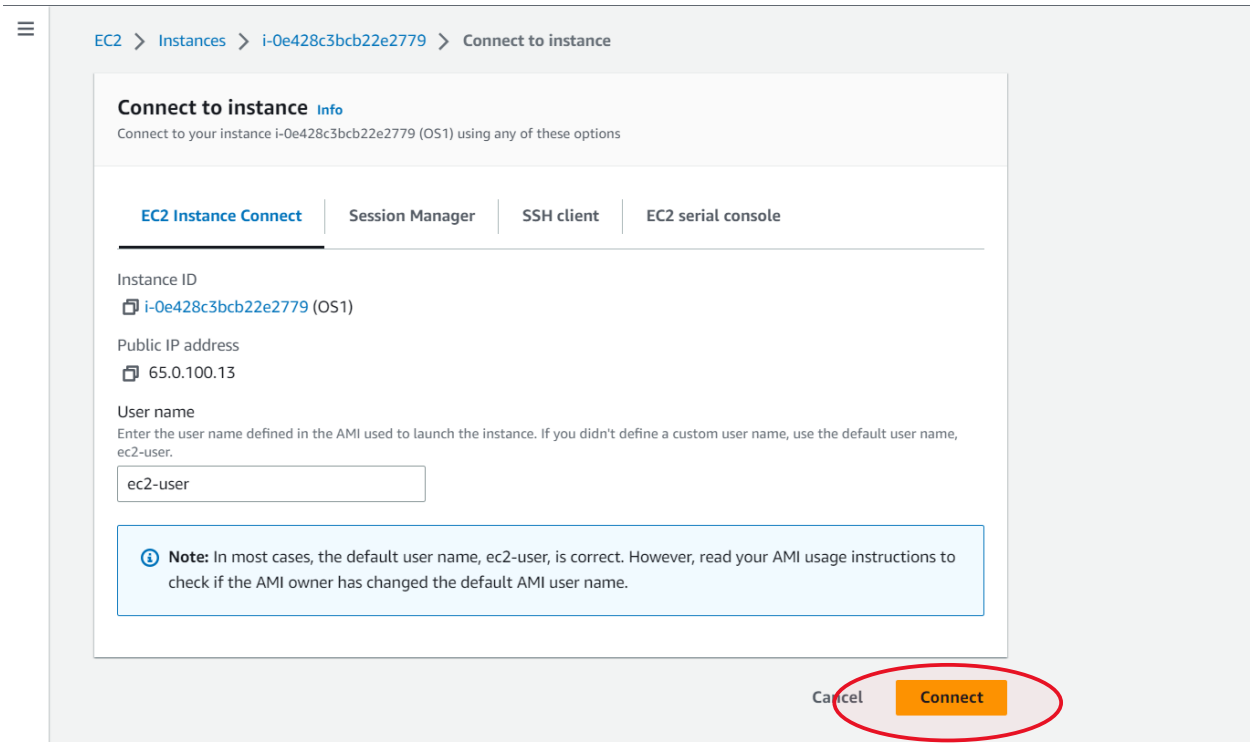
Description - *required* Info

launch-wizard-1 created 2023-03-24T14:18:45.020Z



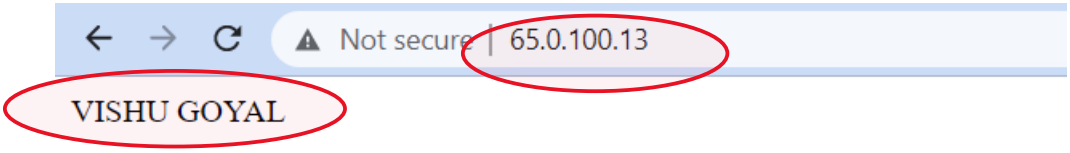
Just click on the advanced details

After launching the system you can just connect the VM

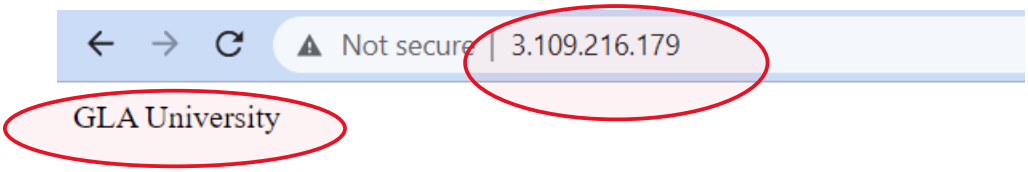


- **sudo su –**
- **yum install httpd**
- **cd /var/www/html**
- **touch index.html**
- **echo "Vishu Goyal" > index.html**
- **systmctl start httpd**
- **systemctl enable httpd**

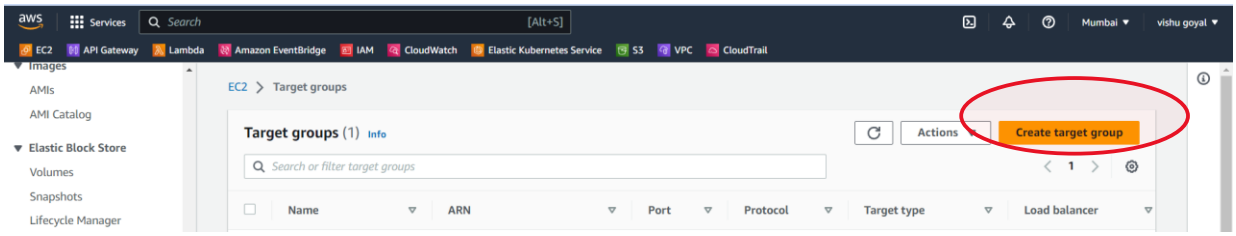
Have to run on the connected instance or virtual machine

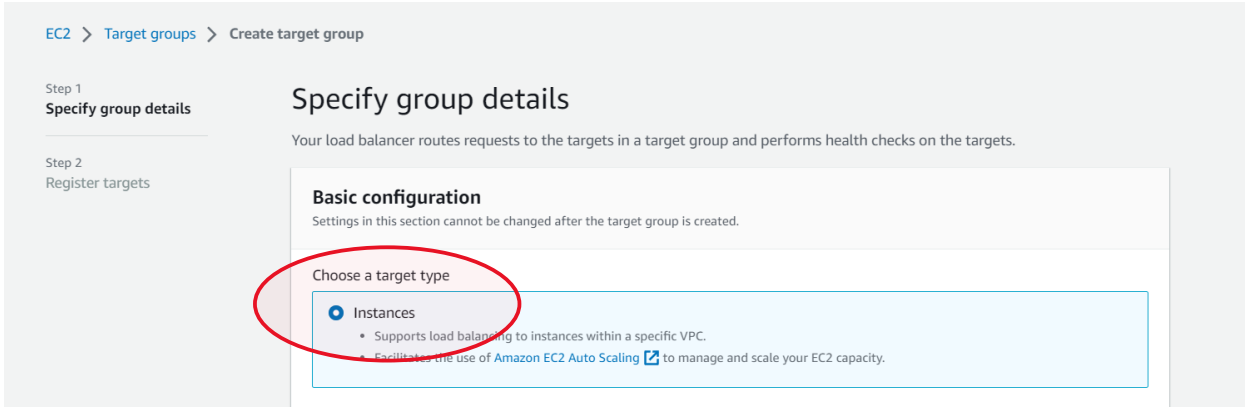


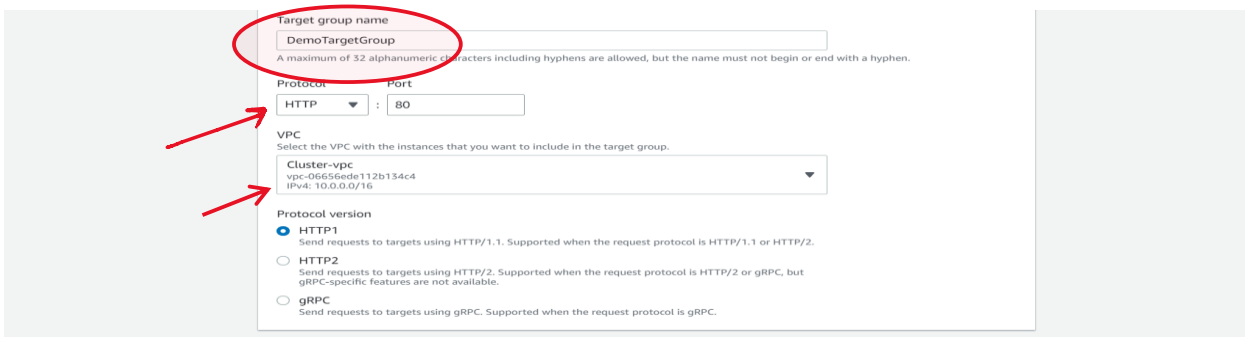
Like the above instance we can also launch one more instance with data GLA University

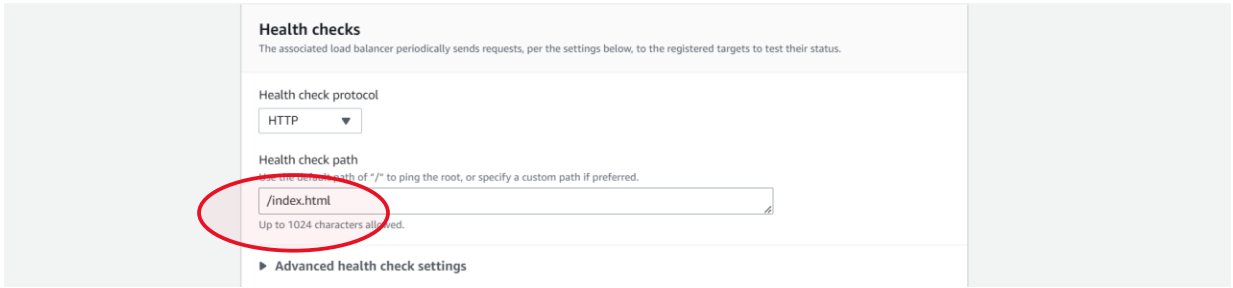


Step 3: Now you have to create a target group of these two instances

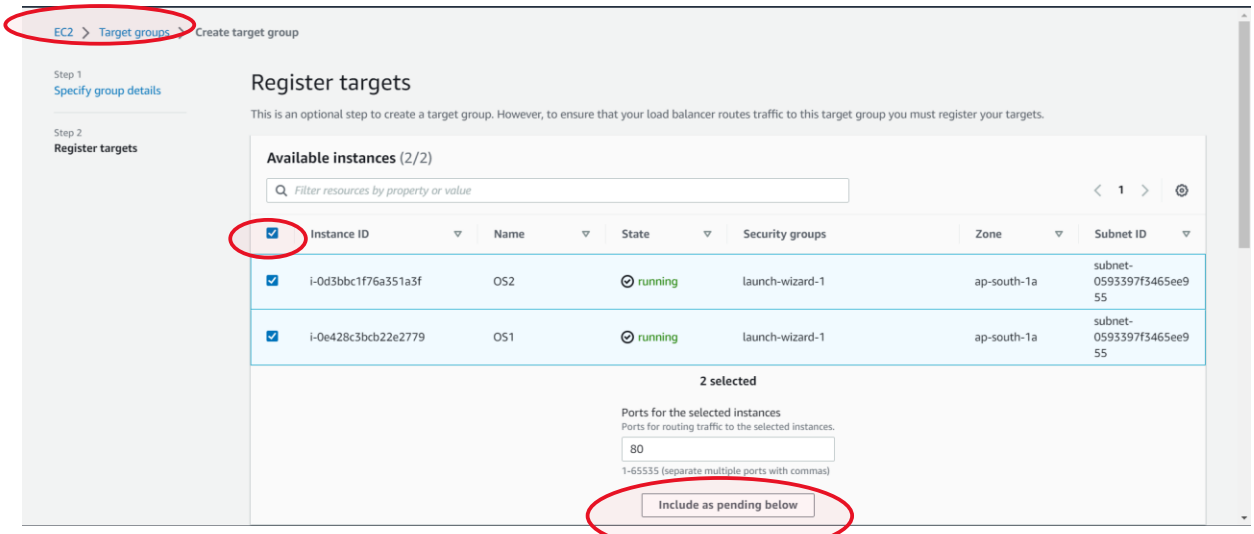


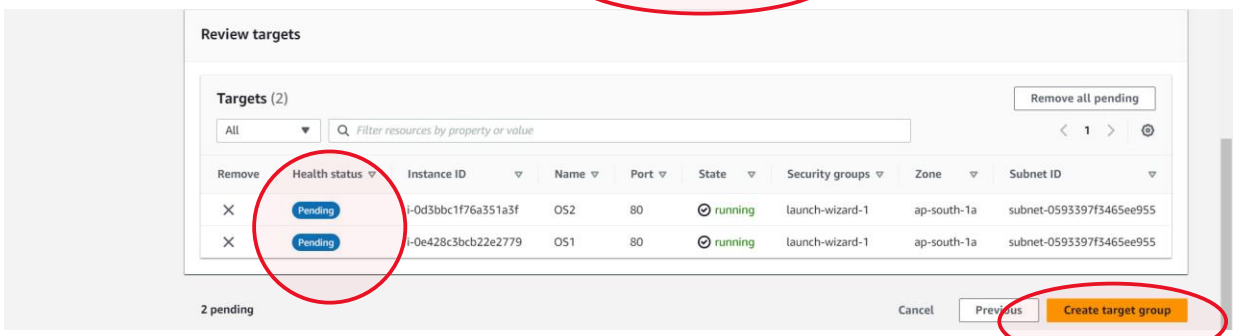




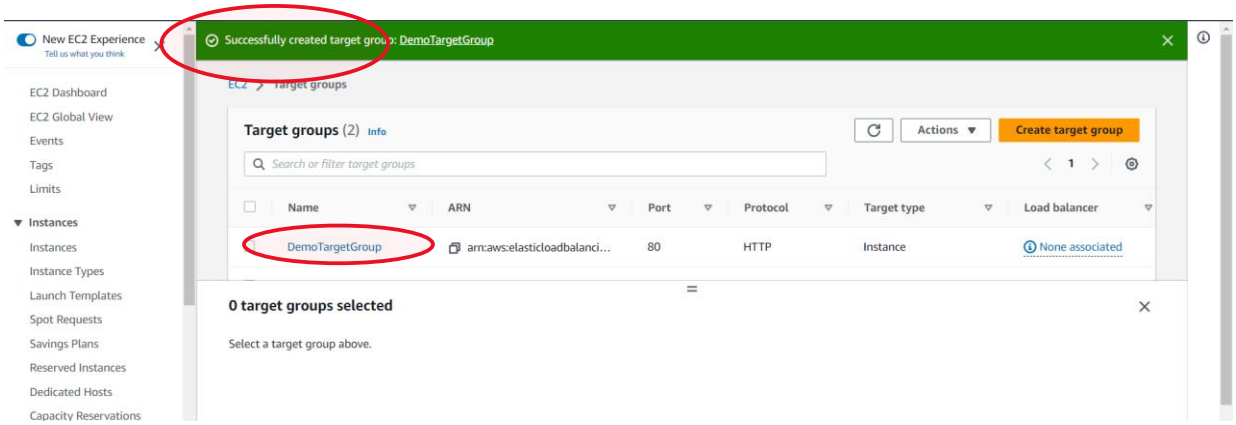


Click the next button

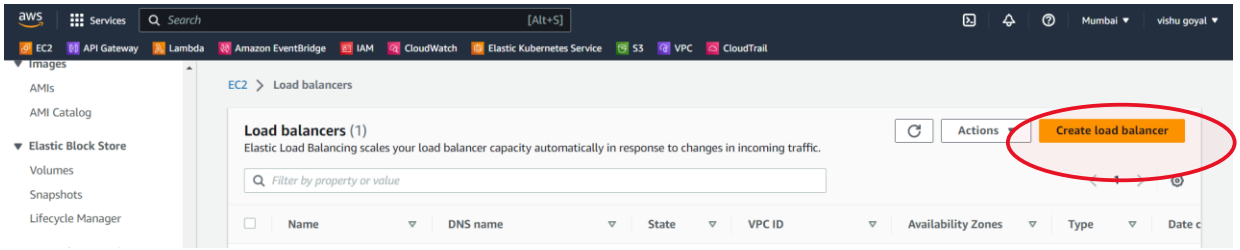




The target group interface looks like that.



Step 4 : Now you have to create a loadbalancer



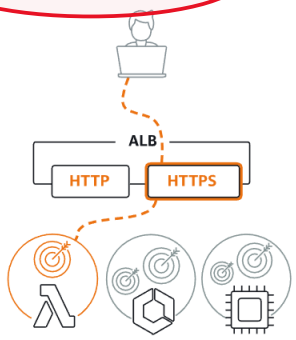
EC2 > Load balancers > Select load balancer type

Select load balancer type

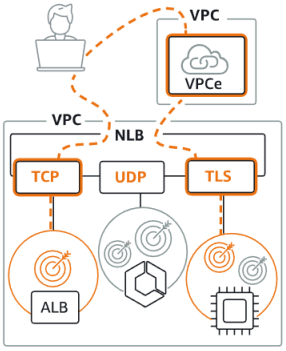
A complete feature-by-feature comparison along with detailed highlights is also available. Learn more

Load balancer types

Application Load Balancer Info



Network Load Balancer Info



Gateway Load Balancer Info

aws Services Search [Alt+S]

EC2 API Gateway Lambda Amazon EventBridge IAM CloudWatch Elastic Kubernetes Service S3 VPC CloudTrail

▸ How Elastic Load balancing works

Basic configuration

Load balancer name

Name must be unique within your AWS account and cannot be changed after the load balancer is created.

DemoLoadBalancer

A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

Scheme Info

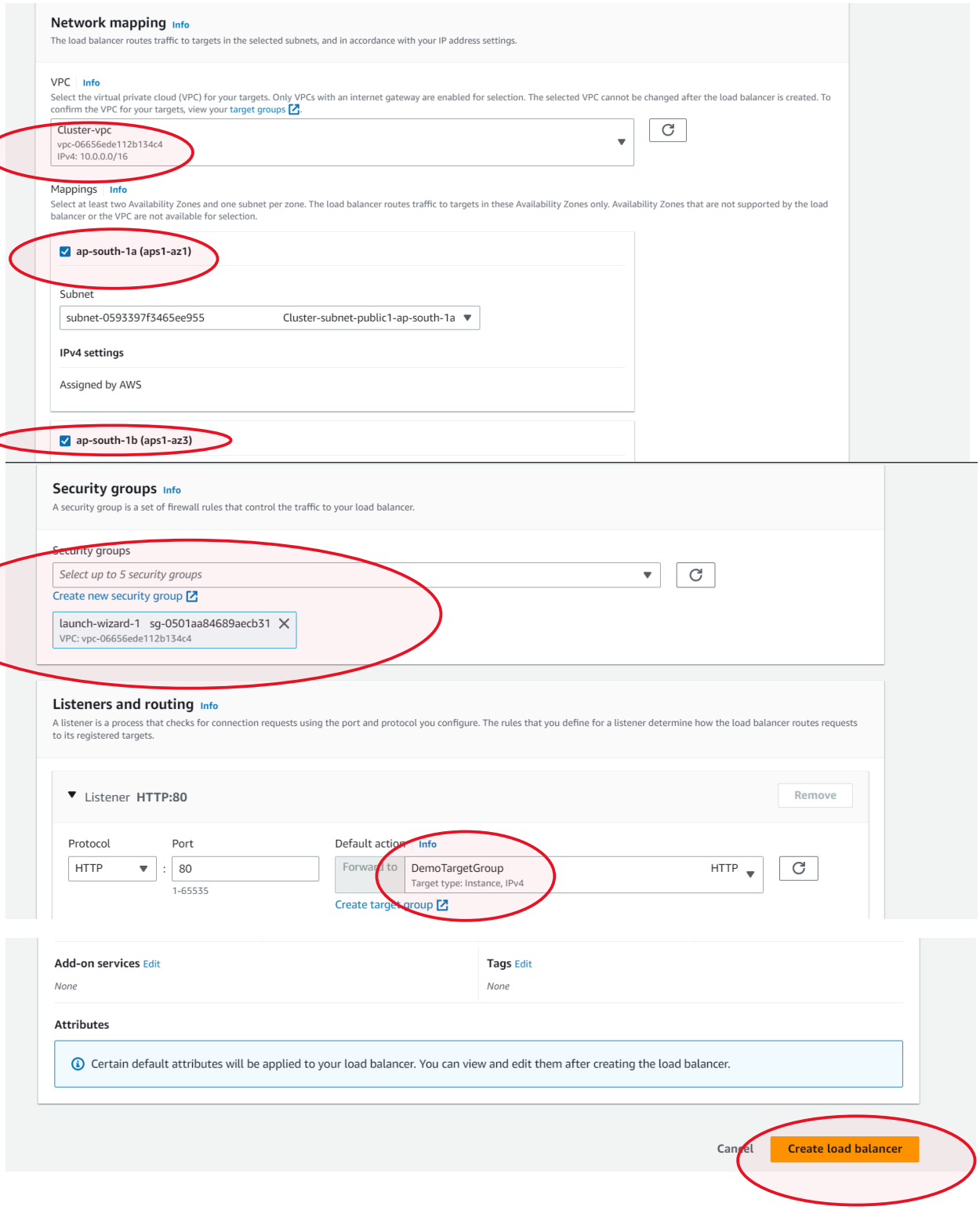
Scheme cannot be changed after the load balancer is created.

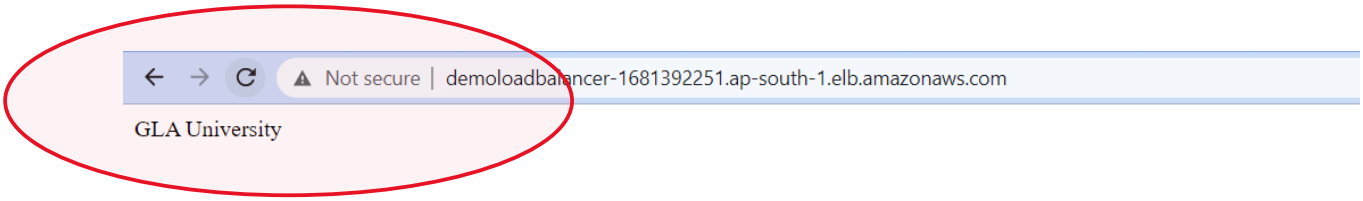
- (●) Internet-facing
  An internet-facing load balancer routes requests from clients over the internet to targets. Requires a public subnet. Learn more
- ( ) Internal
  An internal load balancer routes requests from clients to targets using private IP addresses.

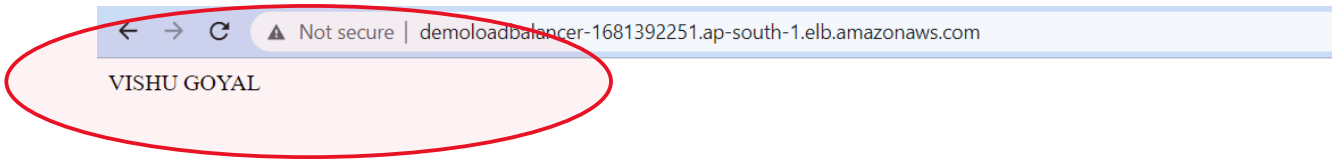
IP address type Info

Select the type of IP addresses that your subnets use.

- (●) IPv4
  Recommended for internal load balancers.
- ( ) Dualstack
  Includes IPv4 and IPv6 addresses.


Network mapping Info
The load balancer routes traffic to targets in the selected subnets, and in accordance with your IP address settings.
VPC Info
Select the virtual private cloud (VPC) for your targets. Only VPCs with an internet gateway are enabled for selection. The selected VPC cannot be changed after the load balancer is created. To confirm the VPC for your targets, view your target groups.
Cluster-vpc
vpc-06656ede112b134c4
IPv4: 10.0.0.0/16
Mappings Info
Select at least two Availability Zones and one subnet per zone. The load balancer routes traffic to targets in these Availability Zones only. Availability Zones that are not supported by the load balancer or the VPC are not available for selection.
ap-south-1a (aps1-az1)
Subnet
subnet-0593397f3465ee955
Cluster-subnet-public1-ap-south-1a
IPv4 settings
Assigned by AWS
ap-south-1b (aps1-az3)
Security groups Info
A security group is a set of firewall rules that control the traffic to your load balancer.
Security groups
Select up to 5 security groups
Create new security group
launch-wizard-1 sg-0501aa84689aecb31
VPC: vpc-06656ede112b134c4
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 HTTP:80
Remove
Protocol
HTTP
Port
80
1-65535
Default action Info
Forward to
DemoTargetGroup
Target type: Instance, IPv4
HTTP
Create target group
Add-on services Edit
None
Tags Edit
None
Attributes
Certain default attributes will be applied to your load balancer. You can view and edit them after creating the load balancer.
Cancel
Create load balancer





Congratulations,

You have successfully done.