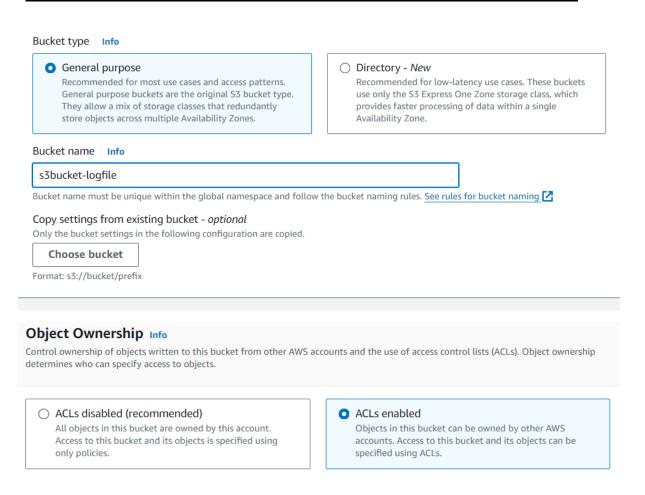
Task 15: Create a S3 bucket, with no public access and upload files to the bucket & view the logs for the uploaded files. Launch two ec2-instances and connect it to a application load balancer, where the output traffic from the server must be an load balancer IP address

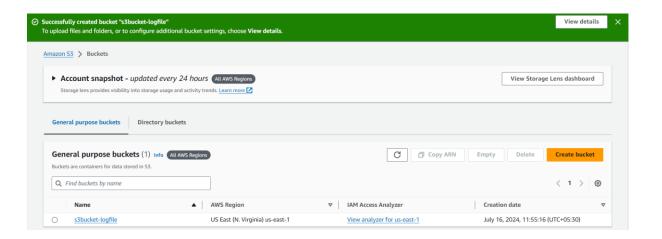
1. Create a S3 bucket, with no public access & view the logs for the uploaded files:



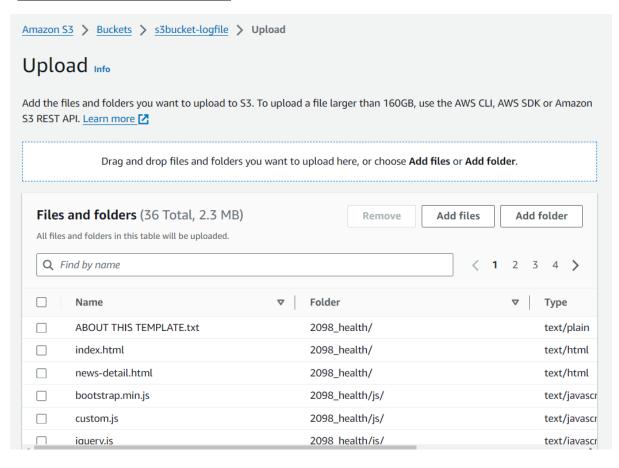
Block Public Access settings for this bucket

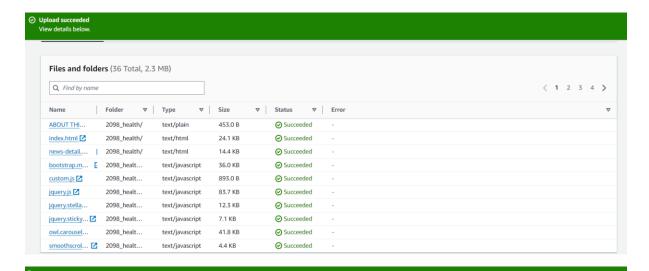
Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. Learn more

		ock all public access ning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.
	- 🗌	Block public access to buckets and objects granted through <i>new</i> access control lists (ACLs) 53 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to 53 resources using ACLs.
ŀ	_ 🗆	Block public access to buckets and objects granted through <i>any</i> access control lists (ACLs) S3 will ignore all ACLs that grant public access to buckets and objects.
	- 🗆	Block public access to buckets and objects granted through <i>new</i> public bucket or access point policies S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
	. 🗆	Block public and cross-account access to buckets and objects through <i>any</i> public bucket or access point policies S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.
	<u>/</u> !	Turning off block all public access might result in this bucket and the objects within becoming public AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

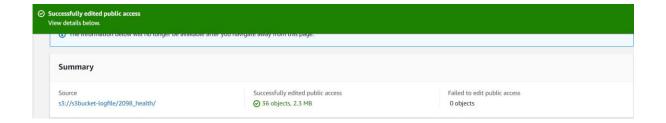


2. Upload files to the bucket:



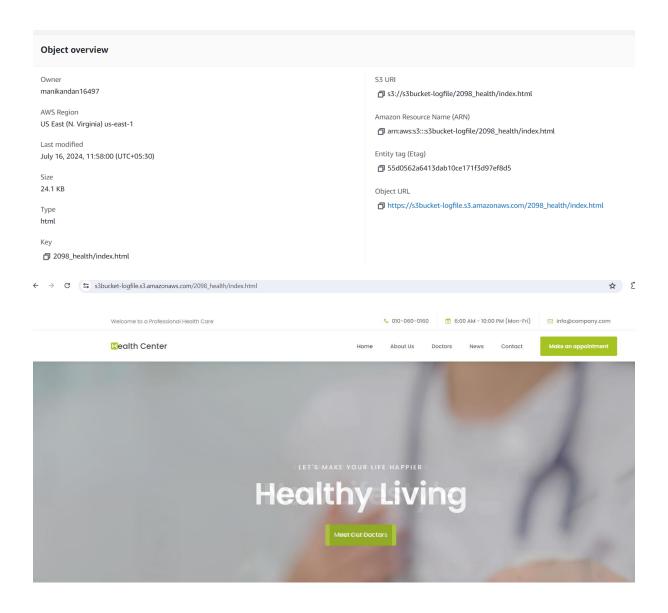




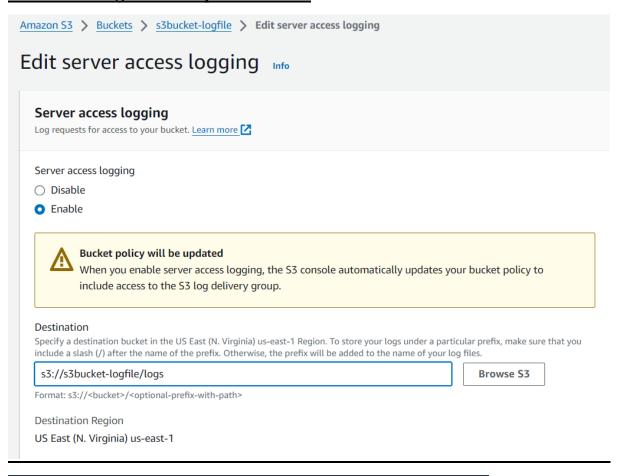


Amazon S3 > Buckets > s3bucket-logfile > Edit static website hosting Edit static website hosting Info Static website hosting Use this bucket to host a website or redirect requests. Learn more Static website hosting Disable Enable Hosting type Host a static website Use the bucket endpoint as the web address. Learn more Redirect requests for an object Redirect requests to another bucket or domain. Learn more (i) For your customers to access content at the website endpoint, you must make all your content publicly readable. To do so, you can edit the S3 Block Public Access settings for the bucket. For more information, see Using Amazon S3 Block Public Access 🛂 Index document Specify the home or default page of the website. index.html

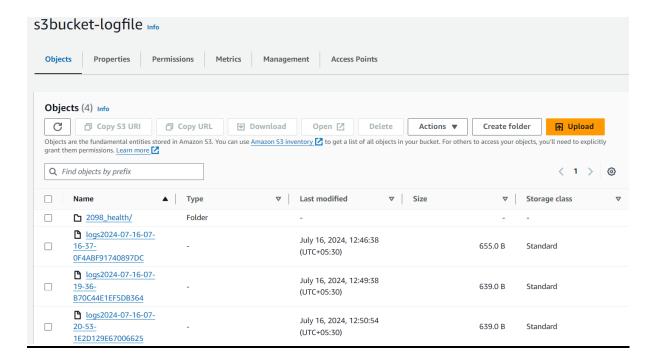
Successfully edited static website hosting.



3. View the logs for the uploaded files:



Successfully edited server access logging.



4. Launch two ec2-instances and connect it to a application load balancer, where the output traffic from the server must be an load balancer IP address:

- Launch two ec2-instances:

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.

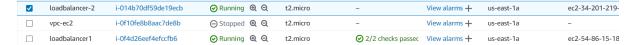
Name and tags Info		
Name		
loadbalancer-2	Add additional tags	

User data - optional Info

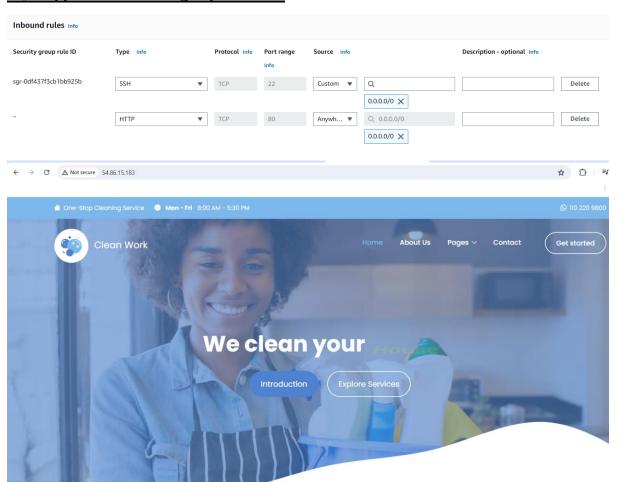
Upload a file with your user data or enter it in the field.

↑ Choose file

#!/bin/bash
sudo apt update -y
sudo apt install nginx -y
sudo systemctl enable nginx
sudo systemctl start nginx
echo "<h1>Hello World from \$(hostname -f)</h1>" > /var/www/html/index.html



My 2 applications running in port no 80:



Hello World from ip-172-31-36-47.ec2.internal

5. Create load balancer:

Scheme Info

Internet-facing

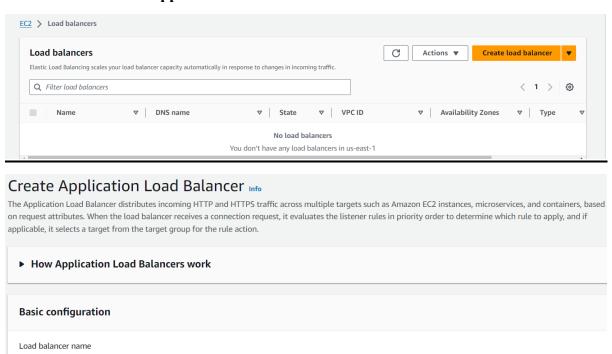
Scheme can't be changed after the load balancer is created.

- connect it to a application load balancer

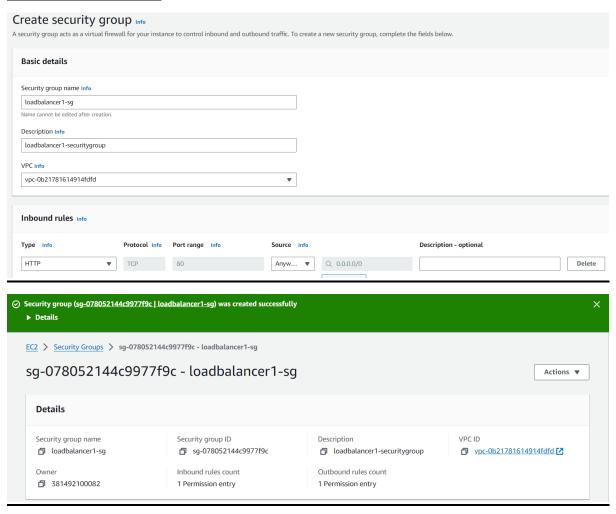
A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

An internet-facing load balancer routes requests from clients over the internet to targets. Requires a public subnet. Learn more Internal

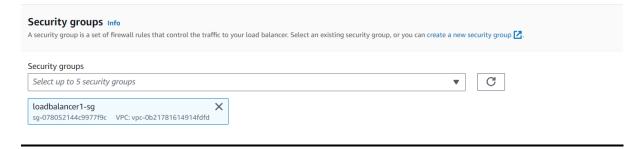
An internal load balancer routes requests from clients to targets using private IP addresses. Compatible with the IPv4 and Dualstack IP



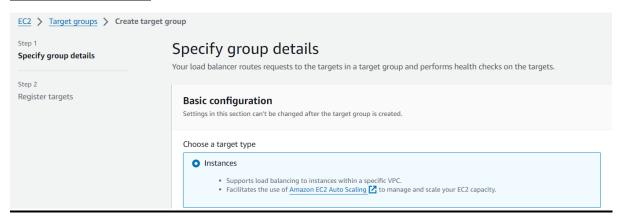
Create security group:



Select the Created security group while creating load balancer:



Create target group:



Target group name

loadbalancer-tg

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

Protocol: Port

Choose a protocol for your target group that corresponds to the Load Balancer type that will route traffic to it. Some protocols now include anomaly detection for the targets and you can set mitigation options once your target group is created. This choice cannot be changed after creation



IP address type

Only targets with the indicated IP address type can be registered to this target group.

O IPv4

Each instance has a default network interface (eth0) that is assigned the primary private IPv4 address. The instance's primary private IPv4 address is the one that will be applied to the target.

O IPv6

Each instance you register must have an assigned primary IPv6 address. This is configured on the instance's default network interface (eth0). Learn more

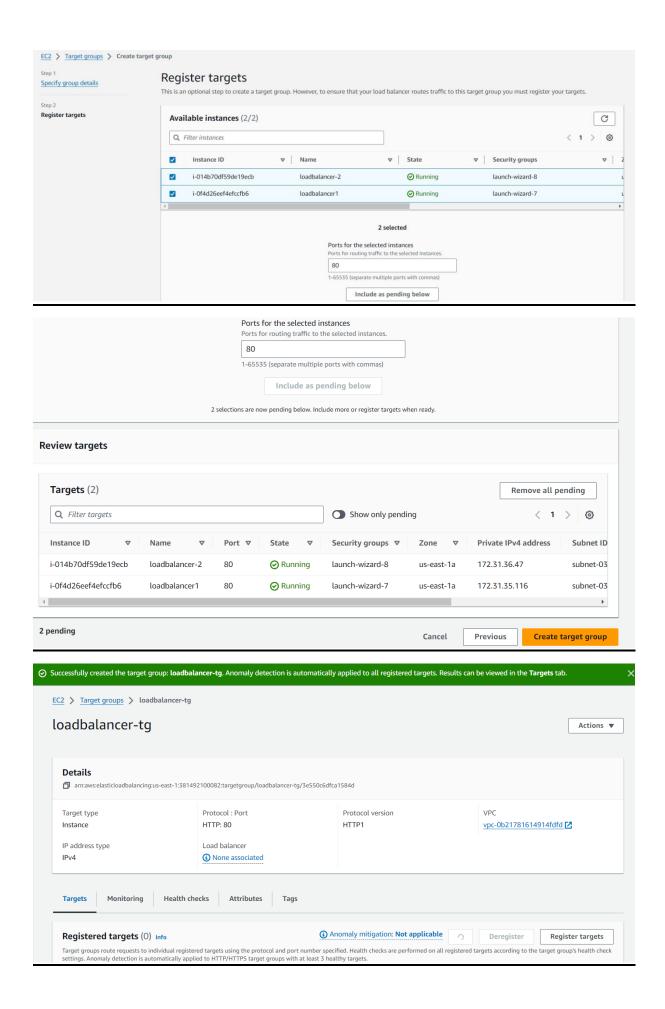
VPC

Select the VPC with the instances that you want to include in the target group. Only VPCs that support the IP address type selected above are available in this list.

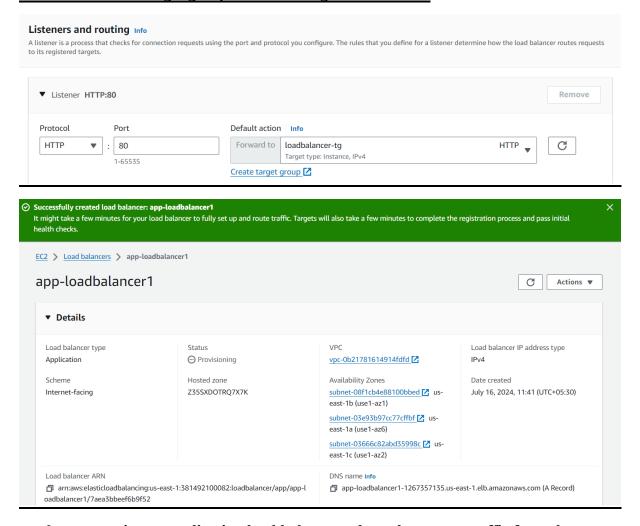


Protocol version



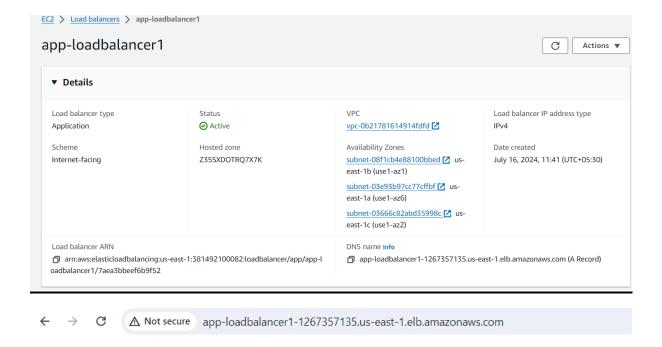


Select the created target group while creating load balancer:



6. connect it to a application load balancer, where the output traffic from the server must be an load balancer IP address





Hello World from ip-172-31-36-47.ec2.internal

