**Elastic Load balancer mini project**

* LAB OBJECTIVES
* Create a highly available website.
* Protect the website from sudden outages.
* Secure our targets.
* Maintain business continuity.

FLOW

* CREATE THE SG FOR ALB AND WEBERVER
* LAUNCH OUR IMAGE WEBSERVER
* CONFIGURE OUR ARGET GROUP
* CONFIGURE THE TARGET FOR THE TARGET GROUP
* CREATE A LOAD BALANCER AND ASSOCIATE TO THE GROUP
* TESTING

SCRIPT FOR THE WEBSERVERS

SERVER 1

#!/bin/bash

yum install httpd -y

echo '<html><body><h1 style="color:Blue;">Welcome to the Image Server 1yum update -y

 (Blue)</h1></body></html>' > /var/www/html/index.html

sudo systemctl start httpd

sudo systemctl enable httpd

SERVER 2

#!/bin/bash

yum update -y

yum install httpd -y

echo '<html><body><h1 style="color:Red;">Welcome to the Image Server 2 (Red)</h1></body></html>' > /var/www/html/index.html

systemctl start httpd

systemctl enable httpd

STEPS

* Step 1: Create ALB and Webserver Security Goup   -----> alb\_sg and web\_sg

web\_sg should allow alb\_sg on port 80

alb\_sg should allow 0.0.0.0/0 on port 80

NB: please make sure you TAG your resources and note the Alb\_sg ID

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* Step 2: Launch Our Public "Webservers" Let’s name them: image\_server\_1 and tag: image\_server\_2.

Test them using their public IP address.

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* Step 3: Create Target Group with targets (Webserver) -----> name: imageserver-tg

please observe the status

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* Step 4: Create an Application Load Balancer (ALB) -----> name: imageserver-alb

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* Step 5: Observe the target group status again in the console

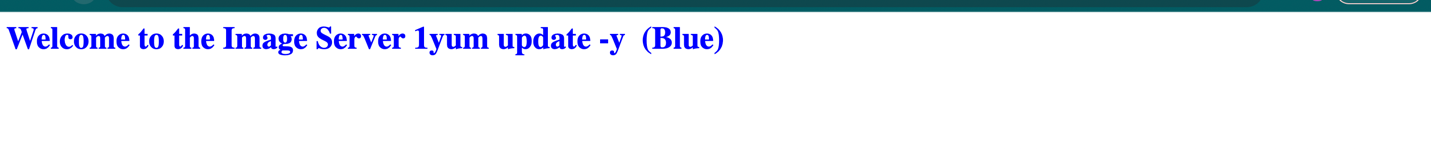
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- Step 6: test your website in a browser using the ALB DNS name and refresh multiple time

\* check the switch between both Blue and Red

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* Step 7: stop webserver 1 and test again to see which server is now responding

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