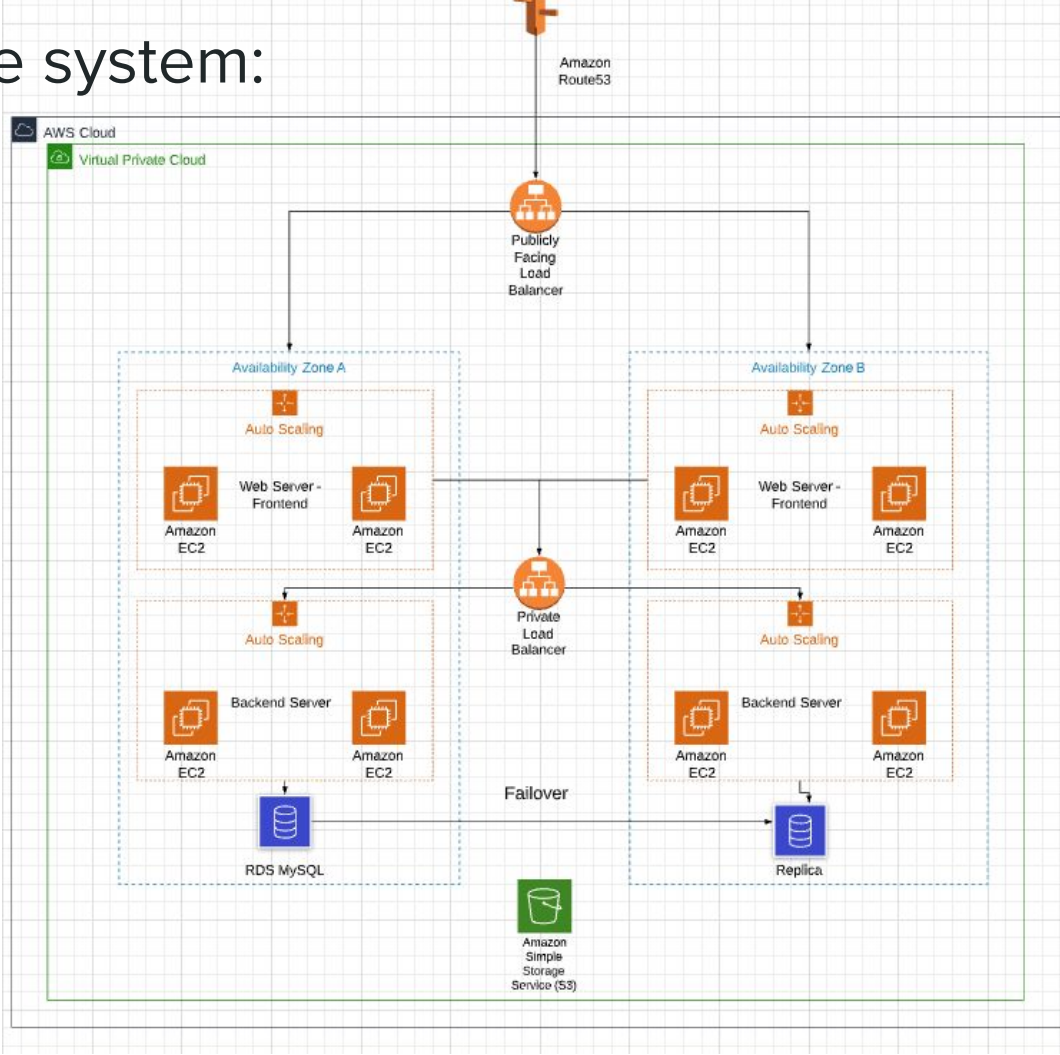


Cloud and the journey for a start-up to Fortune 500 (Follow up)

By: Carina Wickström, Adeeb Syed Shah, MD Rezaul Hasan

Our software system:



Auto Scaling

- Automatically add or remove EC2 instances depending on the load
- Scales depending on a metric

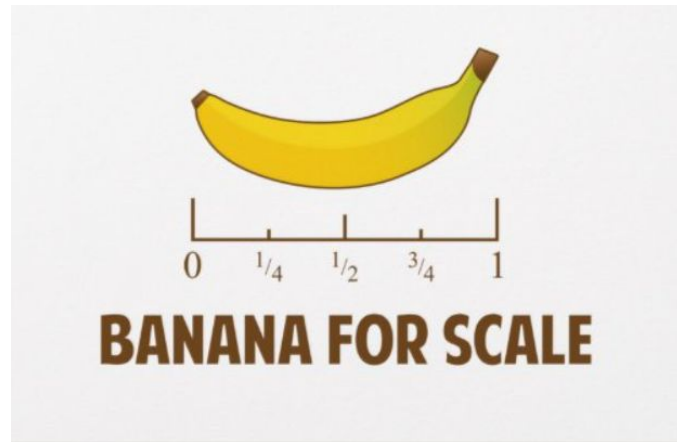
How does the AWS Autoscaling work?

- Dynamic scaling: target tracking
- Fleet management

How to sense when to scale?

We can...

- Use Amazon CloudWatch
- Set a schedule



ASGLaunchConfiguration:

Type: AWS::AutoScaling::LaunchConfiguration

Properties:

AssociatePublicIpAddress: True #TODO: kanske ta bort?

#IamInstanceProfile: String ## TODO: specific Role for EC2 instances?

ImageId: !FindInMap [RegionMap, !Ref "AWS::Region", AMI] #fixa så att man kan välja

InstanceMonitoring: False

InstanceType: !Ref InstanceType # fixa så att man kan välja

#KernelId: String

#KeyName: String # need to check this

LaunchConfigurationName: taquiytservices-ALBLaunchConfiguration

PlacementTenancy: default

SecurityGroups:

- !Ref ASGInstanceSecurityGroup

UserData:

Fn::Base64: !Sub |

#!/bin/bash

sudo su

yum update -y

yum install -y httpd.x86_64

systemctl start httpd.service

systemctl enable httpd.service

echo "Hello World from \$(hostname -f)" > /var/www/html/index.html

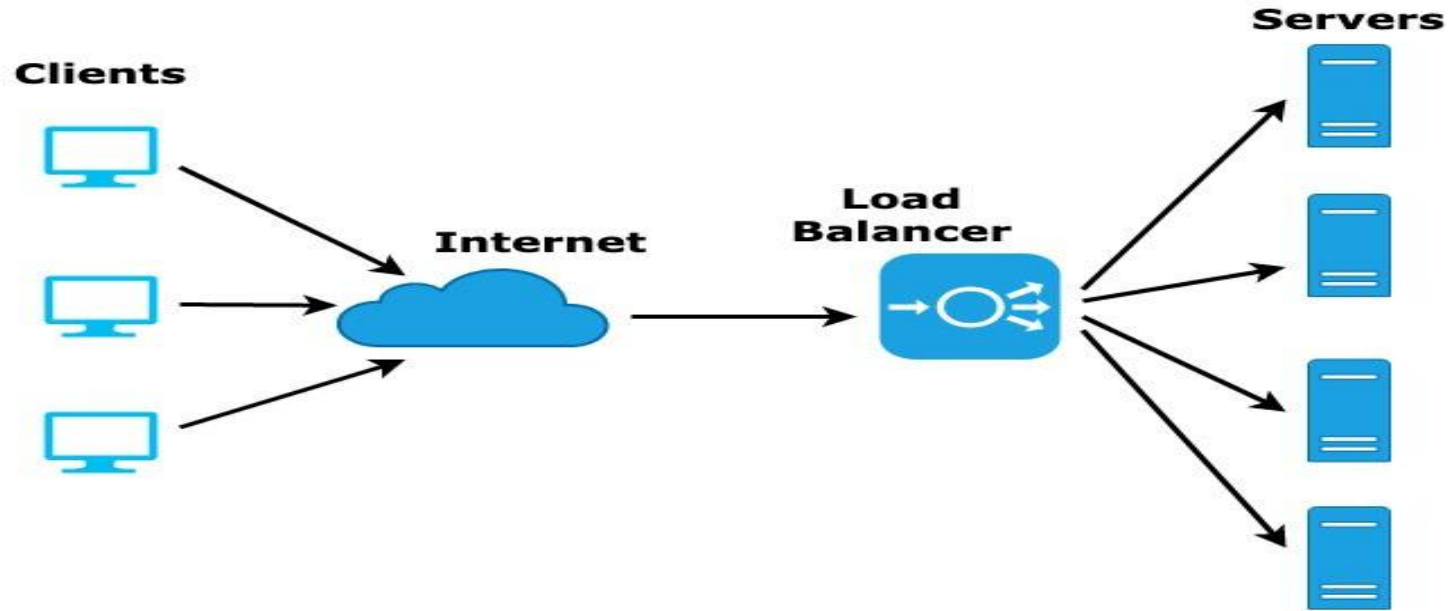
Code ASG

```
ASG:
  Type: AWS::AutoScaling::AutoScalingGroup
  DependsOn: EC2TargetGroup
  Properties:
    AutoScalingGroupName: tauiyt-services-ASG
    VPCZoneIdentifier:
      - !Ref PublicSubnetA
      - !If [BuildPublicB, !Ref PublicSubnetB ,!Ref "AWS::NoValue"]
      - !If [BuildPublicC, !Ref PublicSubnetC ,!Ref "AWS::NoValue"]
      - !If [BuildPublicD, !Ref PublicSubnetD ,!Ref "AWS::NoValue"]
    Cooldown: 300
    HealthCheckGracePeriod: 60
    HealthCheckType: ELB
    LaunchConfigurationName: !Ref ASGLaunchConfiguration # kolla in på detta
    MaxSize: !Ref MaximumAmountOfInstances
    MinSize: !Ref MinimumAmountOfInstances
    TargetGroupARNs:
      - !Ref EC2TargetGroup
```

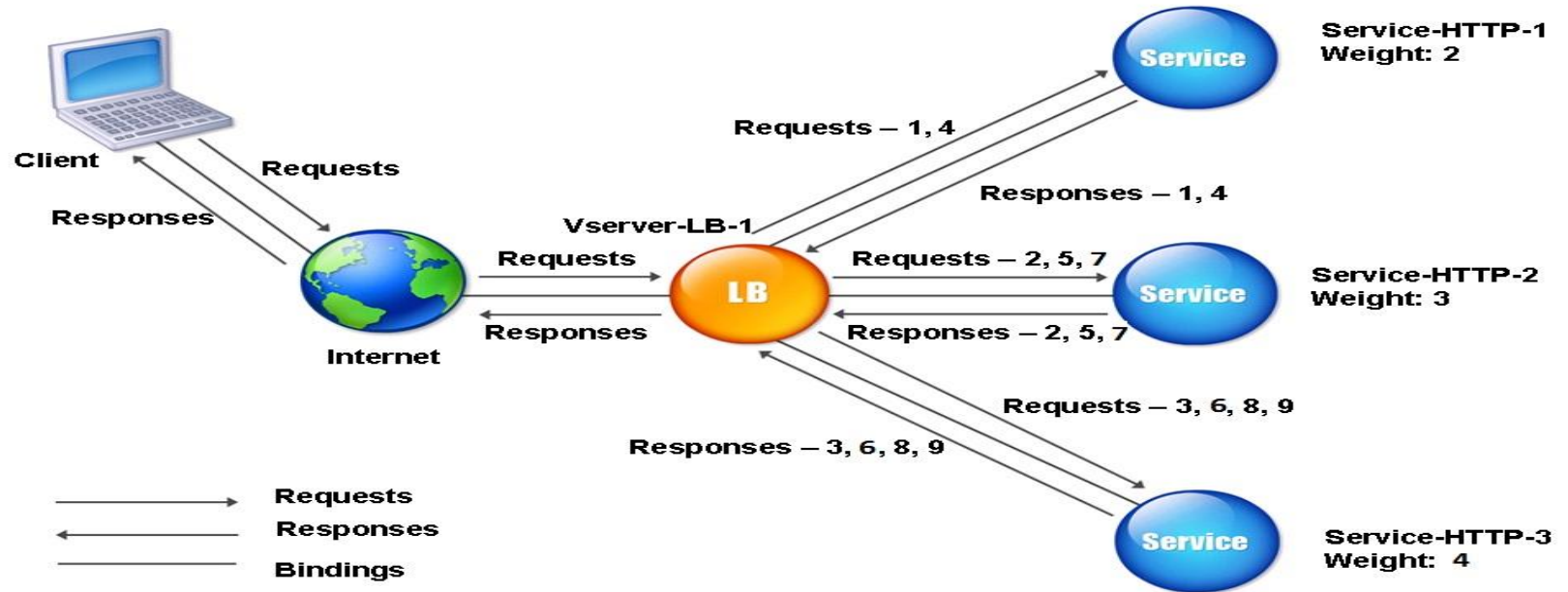
Load Balancing

- Traffic Control
- Server works

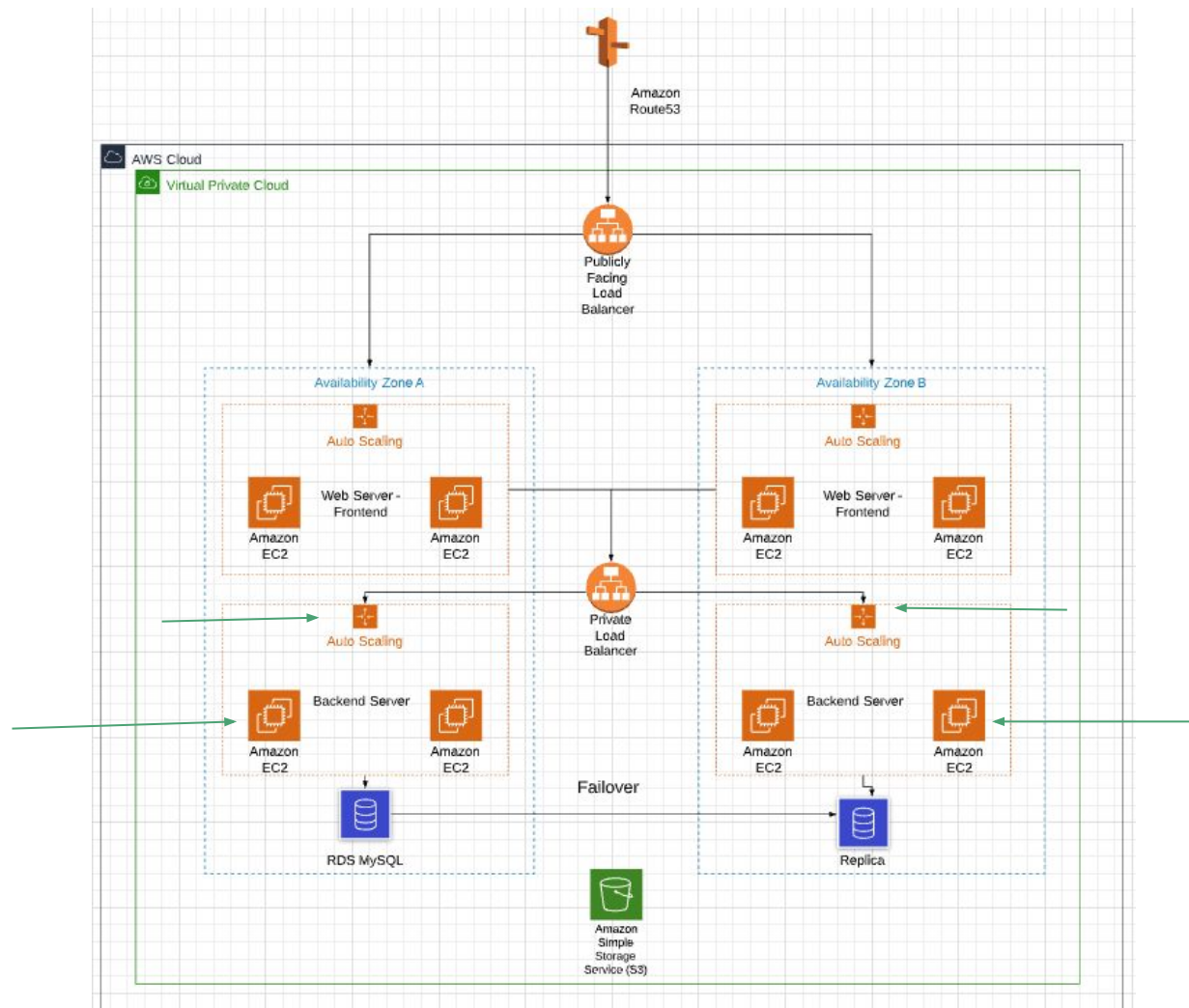
Traffic Control



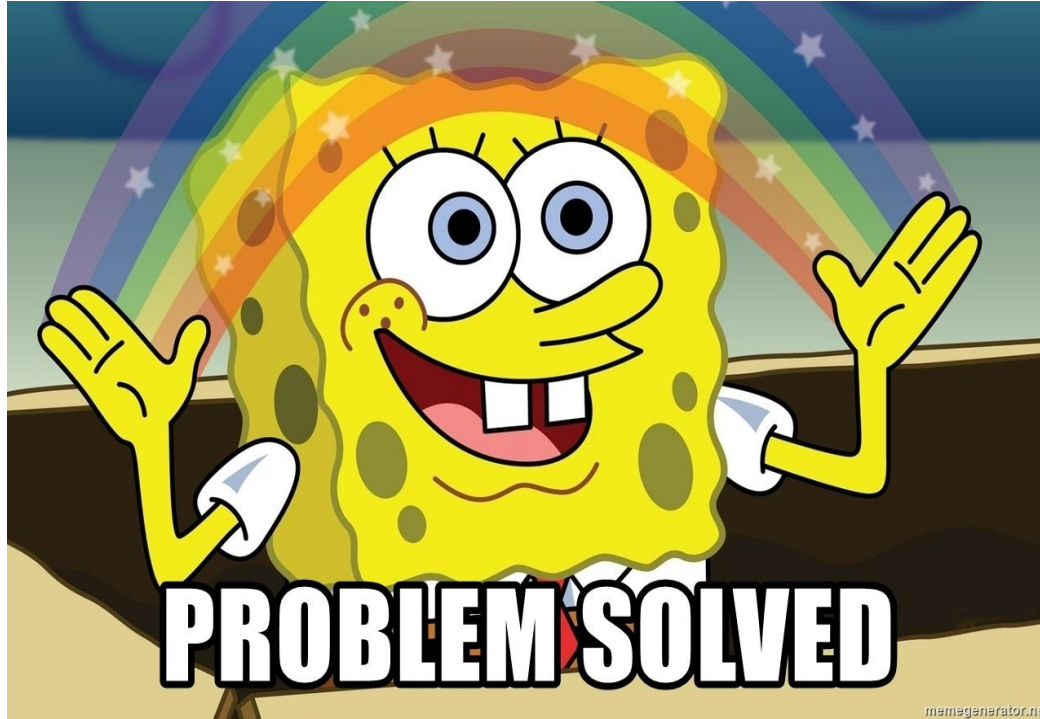
How server works?



Our system task



Finally Done



Story time: Elgiganten

Kökaos på Elgigantens sajt när Black Friday drog i gång

ELGIGANTEN Publicerad 28 nov 2019 kl 23.51

Black Friday: Därför handlar vi prylar vi inte vill ha – så undviker du fällorna 

