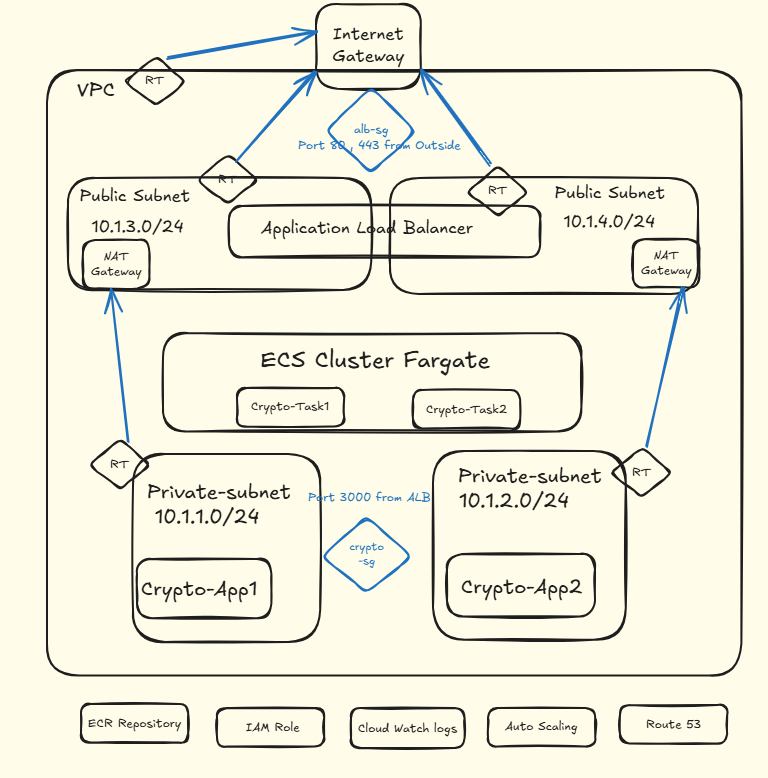
Custom Build Image containerize on ECS Cluster using Separate VPC Cluster



## Basic Network setup

step1: Create a vpc with cidr block 10.1.0.0/16

step2: create 2 private subnet (10.1.1.0/24, 10.1.2.0/24) and 2 public subnet (10.1.3.0/24, 10.1.4.0/24)

step3: Create private and public route tables and associate subnet to respective route tables

step4: Create 1 internet gateway and attach it to vpc

step5: create public route -> from anywhere to internet gateway

step5: Create 2 nat gateway, 1 for each public subnet

step6: Create private route from everywhere to nat gateway for outbound

## Security group setup

step1: 1 security group for alb -> inbound on port 80 and 443 (http and https) from everywhere

step2: 1 security group for crypto app (inbound on port 3000 as we run the app in this port) from alb securty group

# Create a ecr repo

step1: create the ecr repo

step2: note down the detailss

step3: build the ecr login command

## containerise the app

step1: setup the crypto app, dockerfile, etc

step2: write a github action to build and push the image to ecr

step3: configure the secrets and build the image, ecr login and push to repo

## ECS deployment

step1: create a ecs cluster

step2: create a task definition with the flask image, a cloud watch log group, ecs execution role(that has access to ecr)

step3: create an ecs service using private subnet pubic ip disabled, ecs security group

step4: associate an alb while creating the ecs service that has a http listener on port 8000(as per the app) and target group

step5: access the app using load baancer dns

## DNS

step1: register a domain

step2: create public dns zone

step3: create a route from the domain(or subdomain) to load balancer using alias config

step4: test accessing the app with domain

### ssl config

step6: create a certificate with aws acm

step7: Do the certificate validation with the domain

step8: create a https listener

step9: access the app on domain name on https

Custom Application = Crypto App

Structure file

A screenshot of a computer

AI-generated content may be incorrect.

Dockerfile

A screenshot of a computer program

AI-generated content may be incorrect.

Docker image

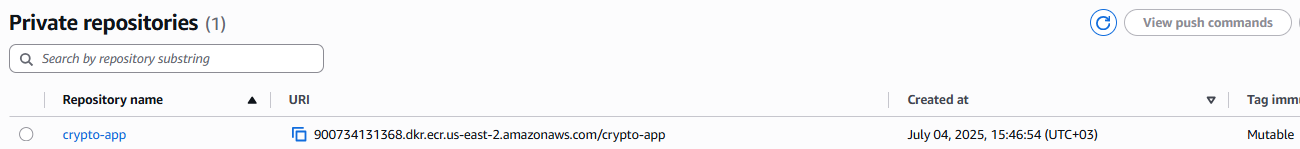
A close up of a computer screen

AI-generated content may be incorrect.

Crypto-app and Tagged image

ECR Repository

Pushed the image to AWS ecr repository

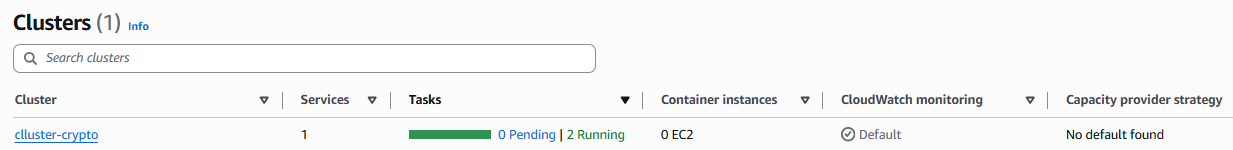


Security Group

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ECS Cluster



Service

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Task

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Task definition

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Loadbalancer

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A screenshot of a computer

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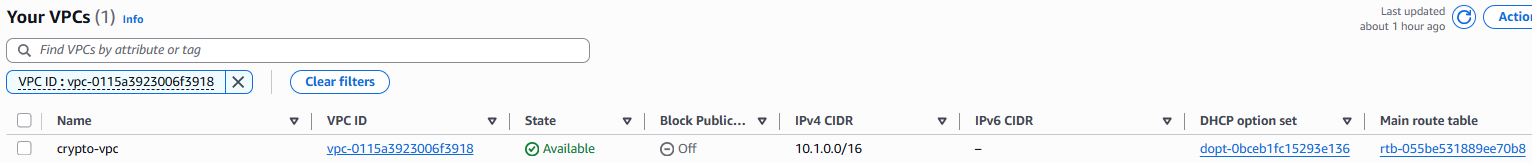
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A screenshot of a computer

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VPC



A screenshot of a computer

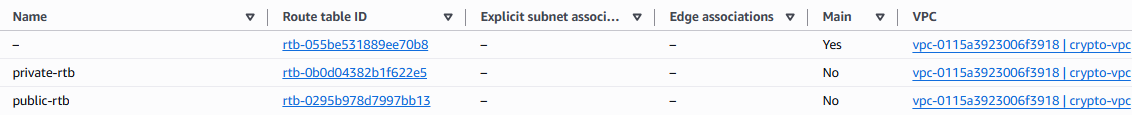
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Subnets

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Route Tables



VPC Route table

A screenshot of a login box

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Private Route Table

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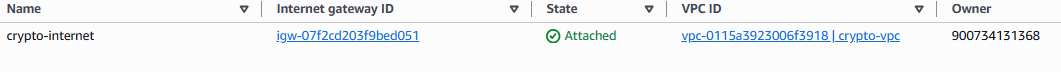
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Public Route Table

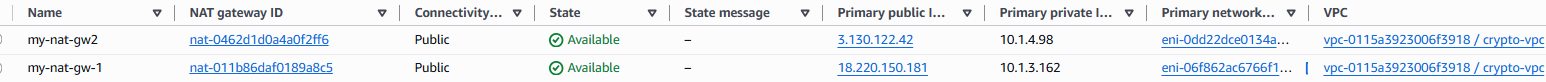
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Internet GW



Nat-Gateway



Route 53

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A Record Details

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Accessing Application from public domain

<http://zeroshellsecops.cloud>

A screenshot of a computer

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