Multi-Region Disaster Recovery

Objective

To design and implement a multi-region disaster recovery (DR) architecture using AWS services, where infrastructure is deployed in two AWS regions: one as Primary (active) and the other as Disaster Recovery (standby). The infrastructure will ensure:

High availability and scalability,

Cross-region data replication,

Automatic failover and failback,

Infrastructure as Code using Terraform for consistency and repeatability.

AWS Services Used

VPC : Network isolation in each region (public/private subnets)

EC2: Host static web content from S3 via user_data

Application Load Balancer: Load traffic across EC2 instances

Auto Scaling Group: Ensure high availability and scaling

S3: Static content and cross-region replication

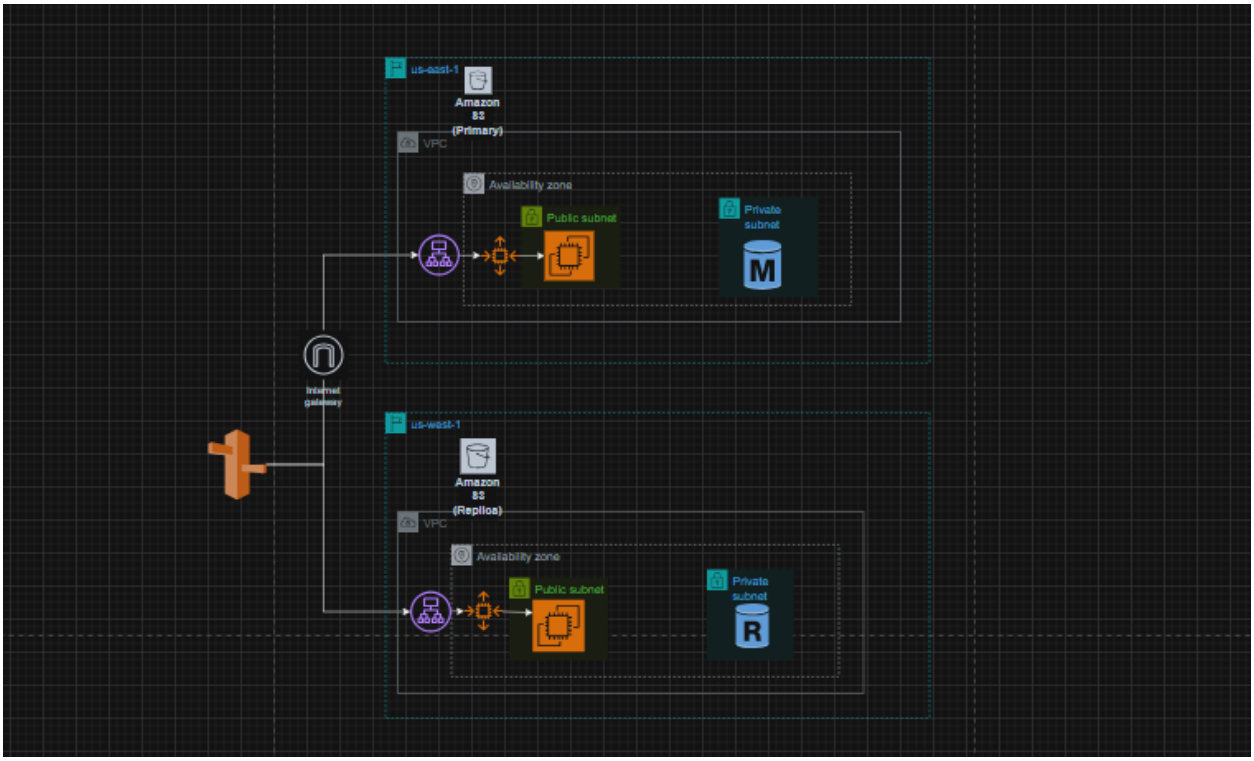
RDS (MySQL): Primary DB in Region 1, replica in Region 2

Route 53: DNS-based failover to redirect traffic to DR region

IAM: Permissions for EC2, S3 replication, etc.

T**erraform**: Infrastructure as Code (IaC) for automation

Architecture diagram



It is designed to provide high availability and disaster recovery for a web application by distributing its components across two separate AWS region .It ensures that if the primary region becomes unavailable, traffic can be automatically failed over to a secondary region with minimal data loss and downtime .

Terraform files over view

1. providers.tf

Defines the AWS provider and region

```
terraform {
  required_providers {
    aws = {
      source  = "hashicorp/aws"
      version = ">= 6.0"

    }
  }
}

# Provider for the Primary Region
```

```
provider "aws" {
  alias  = "primary"
  region = var.primary_region
}
#Provider for the secondary region
provider "aws" {
  alias  = "secondary"
  region = var.secondary_region
}
```

2. variables.tf

All inputs to make the infrastructure reusable and modular

```
variable "primary_region" {
  default = "us-east-1"
}

variable "secondary_region" {
  default = "us-west-1"
}
variable "vpc_cidr" {
  default = "192.168.4.0/24"
}

variable "public_subnet_cidr_1" {
  default = "192.168.4.0/26"
}

variable "public_subnet_cidr_2" {
  default = "192.168.4.64/26"
}

variable "private_subnet_cidr_1" {
  default = "192.168.4.128/26"
}

variable "private_subnet_cidr_2" {
  default = "192.168.4.192/26"
}

variable "availability_zone_1" {
```

```
  default = "us-east-1a"
}

variable "availability_zone_2" {
  default = "us-east-1b"
}
#cidr of secondary region
variable "vpc_cidr_secondary" {
  default = "192.168.5.0/24"
}

variable "public_subnet_cidr_1_secondary" {
  default = "192.168.5.0/26"
}

variable "public_subnet_cidr_2_secondary" {
  default = "192.168.5.64/26"
}

variable "private_subnet_cidr_1_secondary" {
  default = "192.168.5.128/26"
}

variable "private_subnet_cidr_2_secondary" {
  default = "192.168.5.192/26"
}

variable "availability_zone_1_secondary" {
  default = "us-west-1a"
}

variable "availability_zone_2_secondary" {
  default = "us-west-1c"
}
#RDS
variable "db_username" {
 default = "admin"
}

variable "db_password" {
  default = "MySecurePassword123"
}
```

3. main.tf

VPC and Networking (in Both Regions)

S3 Buckets

Compute Layer – EC2, ALB, ASG

Database – RDS

```
# -------- PRIMARY REGION --------

# VPC
resource "aws_vpc" "primary" {
  provider   = aws.primary
  cidr_block = var.vpc_cidr
  tags       = { Name = "Primary-VPC" }
}

resource "aws_internet_gateway" "primary" {
  provider = aws.primary
  vpc_id   = aws_vpc.primary.id
}

# Public Subnets
resource "aws_subnet" "primary_public_1" {
  provider                = aws.primary
  vpc_id                  = aws_vpc.primary.id
  cidr_block              = var.public_subnet_cidr_1
  availability_zone       = var.availability_zone_1
  map_public_ip_on_launch = true
  tags                    = { Name = "Primary-Public-Subnet-1" }
}

resource "aws_subnet" "primary_public_2" {
  provider                = aws.primary
  vpc_id                  = aws_vpc.primary.id
  cidr_block              = var.public_subnet_cidr_2
  availability_zone       = var.availability_zone_2
  map_public_ip_on_launch = true
  tags                    = { Name = "Primary-Public-Subnet-2" }
}
```

```
# Private Subnets
resource "aws_subnet" "primary_private_1" {
  provider          = aws.primary
  vpc_id            = aws_vpc.primary.id
  cidr_block        = var.private_subnet_cidr_1
  availability_zone = var.availability_zone_1
  tags              = { Name = "Primary-Private-Subnet-1" }
}

resource "aws_subnet" "primary_private_2" {
  provider          = aws.primary
  vpc_id            = aws_vpc.primary.id
  cidr_block        = var.private_subnet_cidr_2
  availability_zone = var.availability_zone_2
  tags              = { Name = "Primary-Private-Subnet-2" }
}

# Route Table
resource "aws_route_table" "primary_public_rt" {
  provider = aws.primary
  vpc_id   = aws_vpc.primary.id

  route {
    cidr_block = "0.0.0.0/0"
    gateway_id = aws_internet_gateway.primary.id
  }
}

resource "aws_route_table_association" "primary_public_assoc_1" {
  provider       = aws.primary
  subnet_id      = aws_subnet.primary_public_1.id
  route_table_id = aws_route_table.primary_public_rt.id
}

resource "aws_route_table_association" "primary_public_assoc_2" {
  provider       = aws.primary
  subnet_id      = aws_subnet.primary_public_2.id
  route_table_id = aws_route_table.primary_public_rt.id
}

# Security Group
resource "aws_security_group" "primary_web_sg" {
  provider    = aws.primary
  name        = "primary-web-sg"
```

```
  description = "Allow HTTP"
  vpc_id      = aws_vpc.primary.id

  ingress {
    from_port   = 80
    to_port     = 80
    protocol    = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }

  egress {
    from_port   = 0
    to_port     = 0
    protocol    = "-1"
    cidr_blocks = ["0.0.0.0/0"]
  }
}

# IAM Role for EC2 (with S3 readonly access)
resource "aws_iam_role" "ec2_role" {
  name = "ec2-s3-read-role"

  assume_role_policy = jsonencode({
    Version = "2012-10-17",
    Statement = [{
      Effect    = "Allow",
      Principal = { Service = "ec2.amazonaws.com" },
      Action    = "sts:AssumeRole"
    }]
  })
}

resource "aws_iam_role_policy_attachment" "ec2_s3_readonly" {
  role       = aws_iam_role.ec2_role.name
  policy_arn = "arn:aws:iam::aws:policy/AmazonS3ReadOnlyAccess"
}

resource "aws_iam_instance_profile" "ec2_profile" {
  name = "ec2-instance-profile"
  role = aws_iam_role.ec2_role.name
}

# Latest Amazon Linux 2 AMI
data "aws_ami" "amazon_linux_primary" {
  provider    = aws.primary
```

```
  most_recent = true
  owners      = ["amazon"]

  filter {
    name   = "name"
    values = ["amzn2-ami-hvm-*-x86_64-gp2"]
  }
}



# S3 Bucket for static files
resource "aws_s3_bucket" "primary_bucket" {
  provider = aws.primary
  bucket   = "oneill123"
}

resource "aws_s3_bucket_versioning" "primary_bucket_versioning" {
  provider = aws.primary
  bucket   = aws_s3_bucket.primary_bucket.id

  versioning_configuration {
    status = "Enabled"
  }
}

resource "aws_s3_bucket_policy" "primary_public_read" {
  provider = aws.primary
  bucket   = aws_s3_bucket.primary_bucket.id

  policy = jsonencode({
    Version = "2012-10-17",
    Statement = [{
      Sid       = "PublicRead",
      Effect    = "Allow",
      Principal = "*",
      Action    = "s3:GetObject",
      Resource  = "arn:aws:s3:::${aws_s3_bucket.primary_bucket.id}/*"
    }]
  })
}

resource "aws_s3_object" "html" {
  provider     = aws.primary
  bucket       = aws_s3_bucket.primary_bucket.id
```

```
  key          = "index.html"
  source       = "${path.module}/files/index.html.tpl"
  content_type = "text/html"
}
resource "aws_s3_object" "image" {
  bucket       = aws_s3_bucket.primary_bucket.id
  key          = "image.jpg"
  source       = "${path.module}/files/image.jpg"
  content_type = "image/jpeg"

}



# Launch Template with user_data
resource "aws_launch_template" "primary_web_template" {
  provider      = aws.primary
  name_prefix   = "primary-web-sg"
  image_id      = data.aws_ami.amazon_linux_primary.id
  instance_type = "t2.micro"

  iam_instance_profile {
    name = aws_iam_instance_profile.ec2_profile.name
  }

  user_data = base64encode(templatefile("${path.module}/files/user_data.sh.tpl",
{
    s3_bucket = aws_s3_bucket.primary_bucket.bucket
  }))

  vpc_security_group_ids = [aws_security_group.primary_web_sg.id]
}


# Auto Scaling Group
resource "aws_autoscaling_group" "primary_web_asg" {
  provider            = aws.primary
  desired_capacity    = 2
  max_size            = 3
  min_size            = 1
  vpc_zone_identifier = [aws_subnet.primary_public_1.id,
aws_subnet.primary_public_2.id]

  launch_template {
    id      = aws_launch_template.primary_web_template.id
```

```
    version = "$Latest"
  }

  tag {
    key                 = "Name"
    value               = "Primary-Web-ASG"
    propagate_at_launch = true
  }

  health_check_type         = "EC2"
  health_check_grace_period = 300
}

# ALB + Target Group + Listener
resource "aws_lb" "primary_alb" {
  provider           = aws.primary
  name               = "primary-web-alb"
  internal           = false
  load_balancer_type = "application"
  subnets            = [aws_subnet.primary_public_1.id,
aws_subnet.primary_public_2.id]
  security_groups    = [aws_security_group.primary_web_sg.id]
}

resource "aws_lb_target_group" "primary_tg" {
  provider = aws.primary
  name     = "primary-web-target-group"
  port     = 80
  protocol = "HTTP"
  vpc_id   = aws_vpc.primary.id
  health_check {
    path                = "/"
    healthy_threshold   = 2
    unhealthy_threshold = 2
    timeout             = 5
    interval            = 30
    matcher             = "200"
  }
}

resource "aws_lb_listener" "primary_listener" {
  provider          = aws.primary
  load_balancer_arn = aws_lb.primary_alb.arn
  port              = 80
  protocol          = "HTTP"
```

```
  default_action {
    type             = "forward"
    target_group_arn = aws_lb_target_group.primary_tg.arn
  }
}

resource "aws_autoscaling_attachment" "primary_asg_alb_attachment" {
  provider               = aws.primary
  autoscaling_group_name = aws_autoscaling_group.primary_web_asg.name
  lb_target_group_arn    = aws_lb_target_group.primary_tg.arn
}

# RDS Subnet Group
#resource "aws_db_subnet_group" "primary_db_subnet_group" {
 # provider = aws.primary
 # name     = "primary-db-subnet-group"
 # subnet_ids = [
  #  aws_subnet.primary_private_1.id,
   # aws_subnet.primary_private_2.id,
  #]

  #tags = { Name = "Primary DB Subnet Group" }
#}

# Primary RDS
#resource "aws_db_instance" "primary_rds" {
 # provider               = aws.primary
  #allocated_storage      = 20
  #engine                 = "mysql"
  #engine_version         = "8.0"
  #instance_class         = "db.t3.micro"
  #username               = var.db_username
  #password               = var.db_password
  #db_subnet_group_name   = aws_db_subnet_group.primary_db_subnet_group.name
  #vpc_security_group_ids = [aws_security_group.primary_web_sg.id]
  #multi_az               = false
  #publicly_accessible    = false
  #skip_final_snapshot    = true
  #backup_retention_period = 7
  #tags                   = { Name = "Primary RDS" }
#}


# -------- SECONDARY REGION --------
```

```hcl
# Secondary VPC
resource "aws_vpc" "secondary" {
  provider   = aws.secondary
  cidr_block = var.vpc_cidr_secondary
  tags       = { Name = "Secondary-VPC" }
}

resource "aws_internet_gateway" "secondary" {
  provider = aws.secondary
  vpc_id   = aws_vpc.secondary.id
}

# Secondary Public Subnets
resource "aws_subnet" "secondary_public_1" {
  provider                = aws.secondary
  vpc_id                  = aws_vpc.secondary.id
  cidr_block              = var.public_subnet_cidr_1_secondary
  availability_zone       = var.availability_zone_1_secondary
  map_public_ip_on_launch = true
  tags                    = { Name = "Secondary-Public-Subnet-1" }
}

resource "aws_subnet" "secondary_public_2" {
  provider                = aws.secondary
  vpc_id                  = aws_vpc.secondary.id
  cidr_block              = var.public_subnet_cidr_2_secondary
  availability_zone       = var.availability_zone_2_secondary
  map_public_ip_on_launch = true
  tags                    = { Name = "Secondary-Public-Subnet-2" }
}

# Secondary Private Subnets
resource "aws_subnet" "secondary_private_1" {
  provider          = aws.secondary
  vpc_id            = aws_vpc.secondary.id
  cidr_block        = var.private_subnet_cidr_1_secondary
  availability_zone = var.availability_zone_1_secondary
  tags              = { Name = "Secondary-Private-Subnet-1" }
}

resource "aws_subnet" "secondary_private_2" {
  provider          = aws.secondary
  vpc_id            = aws_vpc.secondary.id
  cidr_block        = var.private_subnet_cidr_2_secondary
```

```
  availability_zone = var.availability_zone_2_secondary
  tags              = { Name = "Secondary-Private-Subnet-2" }
}

# Route Table
resource "aws_route_table" "secondary_public_rt" {
  provider = aws.secondary
  vpc_id   = aws_vpc.secondary.id

  route {
    cidr_block = "0.0.0.0/0"
    gateway_id = aws_internet_gateway.secondary.id
  }
}

resource "aws_route_table_association" "secondary_public_assoc_1" {
  provider       = aws.secondary
  subnet_id      = aws_subnet.secondary_public_1.id
  route_table_id = aws_route_table.secondary_public_rt.id
}

resource "aws_route_table_association" "secondary_public_assoc_2" {
  provider       = aws.secondary
  subnet_id      = aws_subnet.secondary_public_2.id
  route_table_id = aws_route_table.secondary_public_rt.id
}

# Security Group
resource "aws_security_group" "secondary_web_sg" {
  provider    = aws.secondary
  name        = "secondary-web-sg"
  description = "Allow HTTP"
  vpc_id      = aws_vpc.secondary.id

  ingress {
    from_port   = 80
    to_port     = 80
    protocol    = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }

  egress {
    from_port   = 0
    to_port     = 0
    protocol    = "-1"
```

```
    cidr_blocks = ["0.0.0.0/0"]
  }
}

# IAM Role for EC2 (with S3 readonly access) - Secondary
resource "aws_iam_role" "ec2_role_secondary" {
  name = "ec2-s3-read-role-secondary"

  assume_role_policy = jsonencode({
    Version = "2012-10-17",
    Statement = [{
      Effect    = "Allow",
      Principal = { Service = "ec2.amazonaws.com" },
      Action    = "sts:AssumeRole"
    }]
  })
}

resource "aws_iam_role_policy_attachment" "ec2_s3_readonly_secondary" {
  role       = aws_iam_role.ec2_role_secondary.name
  policy_arn = "arn:aws:iam::aws:policy/AmazonS3ReadOnlyAccess"
}

resource "aws_iam_instance_profile" "ec2_profile_secondary" {
  name = "ec2-instance-profile-secondary"
  role = aws_iam_role.ec2_role_secondary.name
}

# Latest Amazon Linux 2 AMI
data "aws_ami" "amazon_linux_secondary" {
  provider    = aws.secondary
  most_recent = true
  owners      = ["amazon"]

  filter {
    name   = "name"
    values = ["amzn2-ami-hvm-*-x86_64-gp2"]
  }
}

# S3 Bucket for static files - Secondary Region
resource "aws_s3_bucket" "secondary_bucket" {
  provider = aws.secondary
  bucket   = "oneill123-secondary"
}
```

```
resource "aws_s3_bucket_versioning" "secondary_bucket_versioning" {
  provider = aws.secondary
  bucket   = aws_s3_bucket.secondary_bucket.id

  versioning_configuration {
    status = "Enabled"
  }
}

resource "aws_s3_bucket_policy" "secondary_public_read" {
  provider = aws.secondary
  bucket   = aws_s3_bucket.secondary_bucket.id

  policy = jsonencode({
    Version = "2012-10-17",
    Statement = [{
      Sid       = "PublicRead",
      Effect    = "Allow",
      Principal = "*",
      Action    = "s3:GetObject",
      Resource  = "arn:aws:s3:::${aws_s3_bucket.secondary_bucket.id}/*"
    }]
  })
}

resource "aws_s3_object" "secondary_html" {
  provider     = aws.secondary
  bucket       = aws_s3_bucket.secondary_bucket.id
  key          = "index.html"
  source       = "${path.module}/files/index.html.tpl"
  content_type = "text/html"
}

resource "aws_s3_object" "secondary_image" {
  provider     = aws.secondary
  bucket       = aws_s3_bucket.secondary_bucket.id
  key          = "image.jpg"
  source       = "${path.module}/files/image.jpg"
  content_type = "image/jpeg"

}
# Launch Template with user_data
resource "aws_launch_template" "secondary_web_template" {
  provider      = aws.secondary
```

```
  name_prefix   = "secondary-web-sg"
  image_id      = data.aws_ami.amazon_linux_secondary.id
  instance_type = "t2.micro"

  iam_instance_profile {
    name = aws_iam_instance_profile.ec2_profile_secondary.name
  }

  user_data = base64encode(templatefile("${path.module}/files/user_data.sh.tpl",
{
    s3_bucket = aws_s3_bucket.secondary_bucket.bucket
  }))

  vpc_security_group_ids = [aws_security_group.secondary_web_sg.id]
}


# Auto Scaling Group
resource "aws_autoscaling_group" "secondary_web_asg" {
  provider            = aws.secondary
  desired_capacity    = 2
  max_size            = 3
  min_size            = 1
  vpc_zone_identifier = [aws_subnet.secondary_public_1.id,
aws_subnet.secondary_public_2.id]

  launch_template {
    id      = aws_launch_template.secondary_web_template.id
    version = "$Latest"
  }

  tag {
    key                 = "Name"
    value               = "Secondary-Web-ASG"
    propagate_at_launch = true
  }

  health_check_type         = "EC2"
  health_check_grace_period = 300
}

# ALB + Target Group + Listener
resource "aws_lb" "secondary_alb" {
  provider           = aws.secondary
  name               = "secondary-web-alb"
```

```
  internal           = false
  load_balancer_type = "application"
  subnets            = [aws_subnet.secondary_public_1.id,
aws_subnet.secondary_public_2.id]
  security_groups    = [aws_security_group.secondary_web_sg.id]
}

resource "aws_lb_target_group" "secondary_tg" {
  provider = aws.secondary
  name     = "secondary-web-target-group"
  port     = 80
  protocol = "HTTP"
  vpc_id   = aws_vpc.secondary.id
  health_check {
    path                = "/"
    healthy_threshold   = 2
    unhealthy_threshold = 2
    timeout             = 5
    interval            = 30
    matcher             = "200"
  }
}

resource "aws_lb_listener" "secondary_listener" {
  provider          = aws.secondary
  load_balancer_arn = aws_lb.secondary_alb.arn
  port              = 80
  protocol          = "HTTP"

  default_action {
    type             = "forward"
    target_group_arn = aws_lb_target_group.secondary_tg.arn
  }
}

resource "aws_autoscaling_attachment" "secondary_asg_alb_attachment" {
  provider               = aws.secondary
  autoscaling_group_name = aws_autoscaling_group.secondary_web_asg.name
  lb_target_group_arn    = aws_lb_target_group.secondary_tg.arn
}

# Secondary DB Subnet Group
#resource "aws_db_subnet_group" "secondary_db_subnet_group" {
 # provider = aws.secondary
  #name     = "secondary-db-subnet-group"
```

```
  #subnet_ids = [
   # aws_subnet.secondary_private_1.id,
    #aws_subnet.secondary_private_2.id,
  #]

  #tags = { Name = "Secondary DB Subnet Group" }
#}

# Secondary RDS Read Replica
#resource "aws_db_instance" "secondary_rds" {
 # provider               = aws.secondary
  #allocated_storage      = 20
  #engine                 = "mysql"
  #engine_version         = "8.0"
  #instance_class         = "db.t3.micro"
 # username               = var.db_username
  #password               = var.db_password
  #db_subnet_group_name   = aws_db_subnet_group.secondary_db_subnet_group.name
  #vpc_security_group_ids = [aws_security_group.secondary_web_sg.id]
  #multi_az               = false
  #publicly_accessible    = false
  #skip_final_snapshot    = true
  #backup_retention_period = 7

  #replicate_source_db = aws_db_instance.primary_rds.id

  #tags = { Name = "Secondary RDS Replica" }
#}
```

4. output.tf

```
output "primary_alb_dns" {
  value = aws_lb.primary_alb.dns_name
}

output "secondary_alb_dns" {
  value = aws_lb.secondary_alb.dns_name
}
```

Save these 4 files in the same directory:

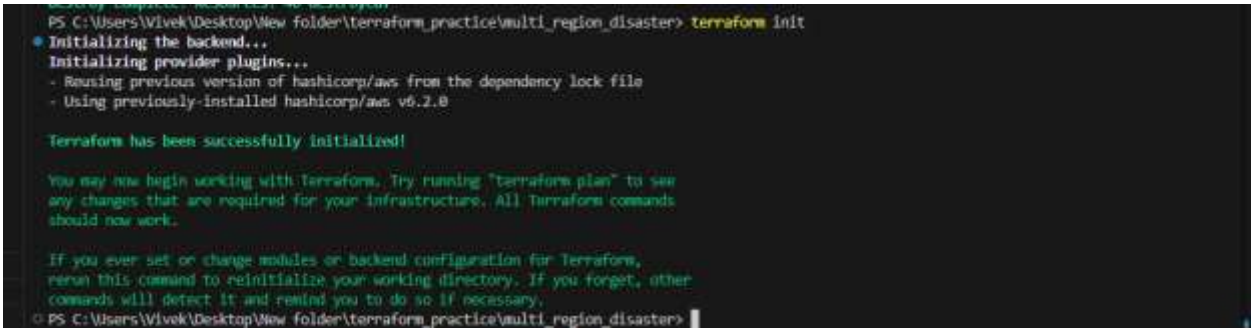
- main.tf

- variables.tf
- providers.tf
- output.tf

Run Terraform commands:

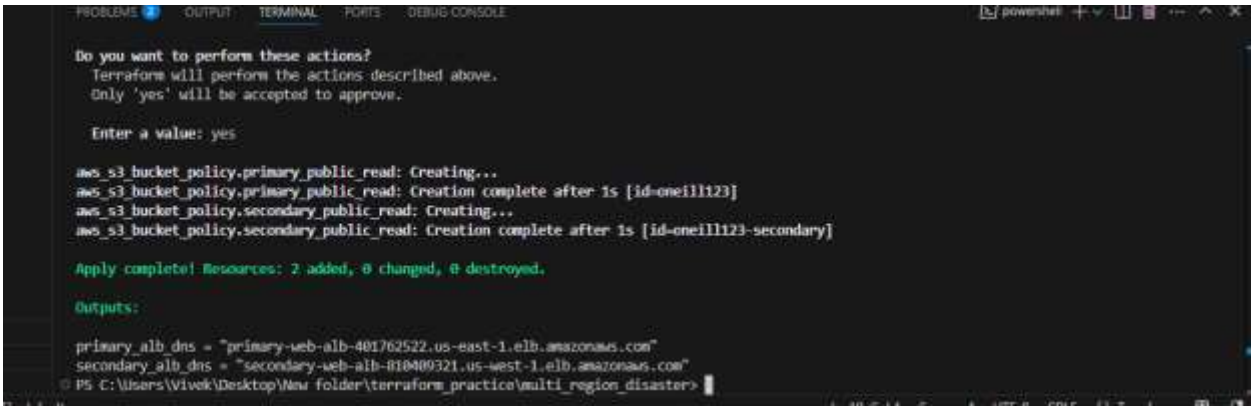
- terraform init
- terraform plan
- terraform apply

Terraform init



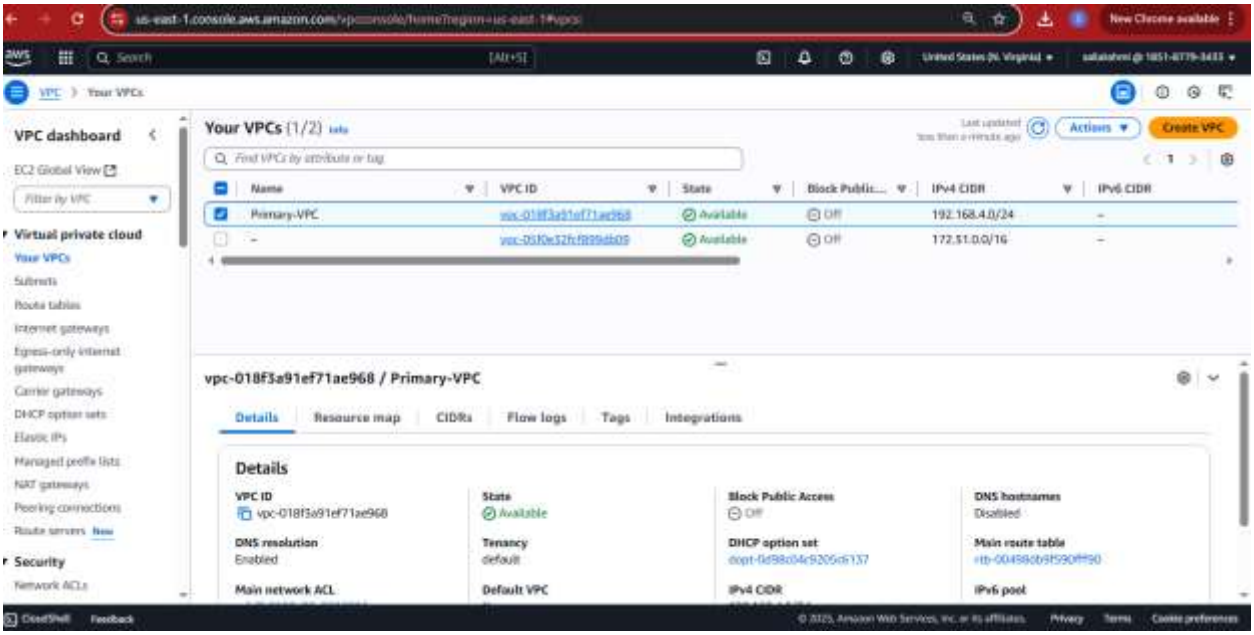
Terraform plan

Terraform apply

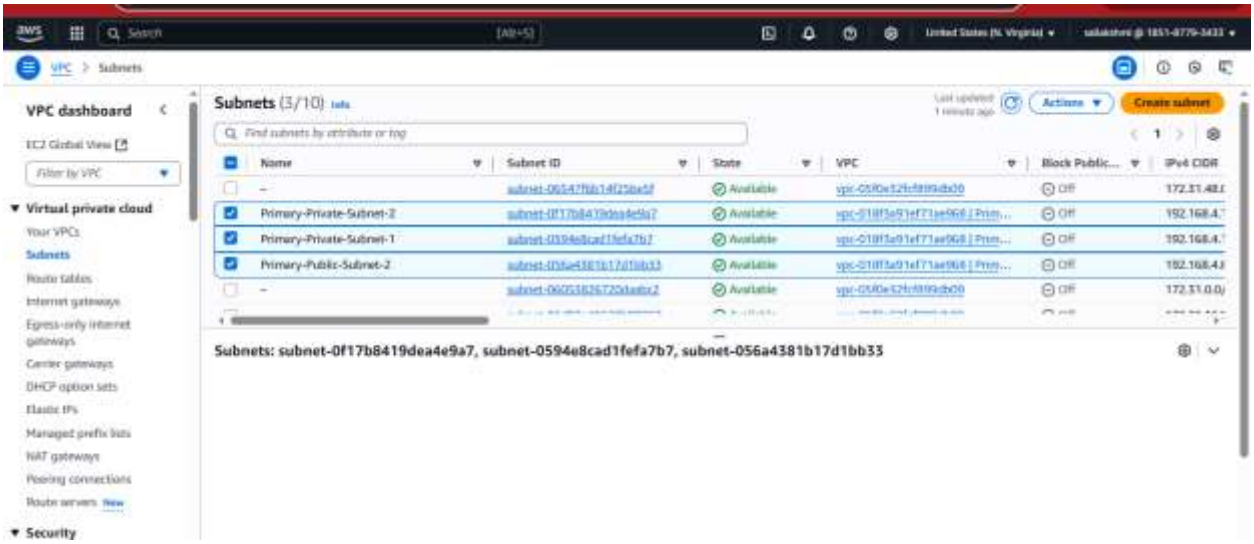


Check in aws console

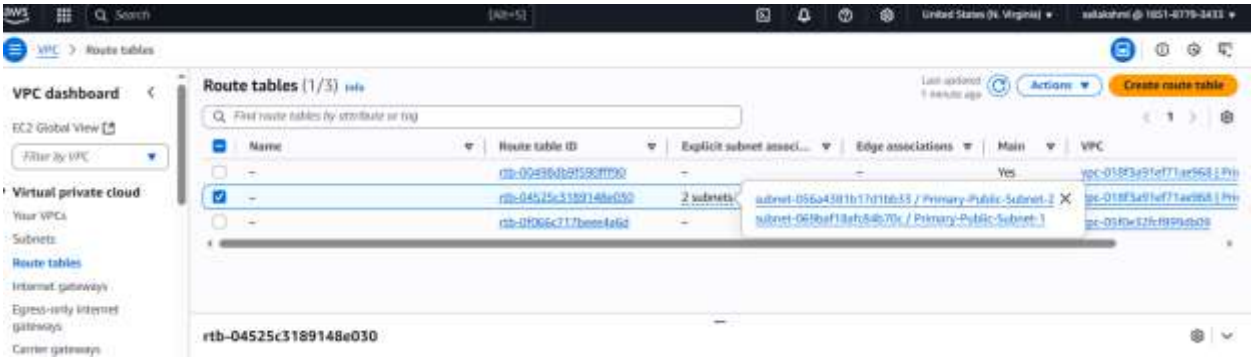
Primary VPC created



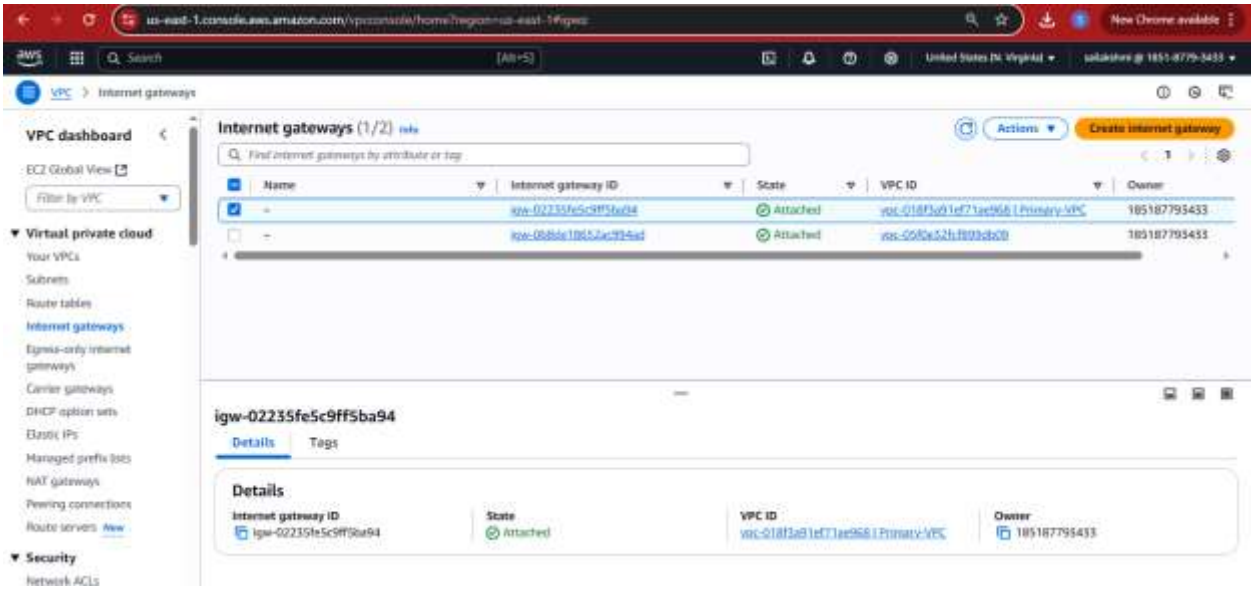
Subnets



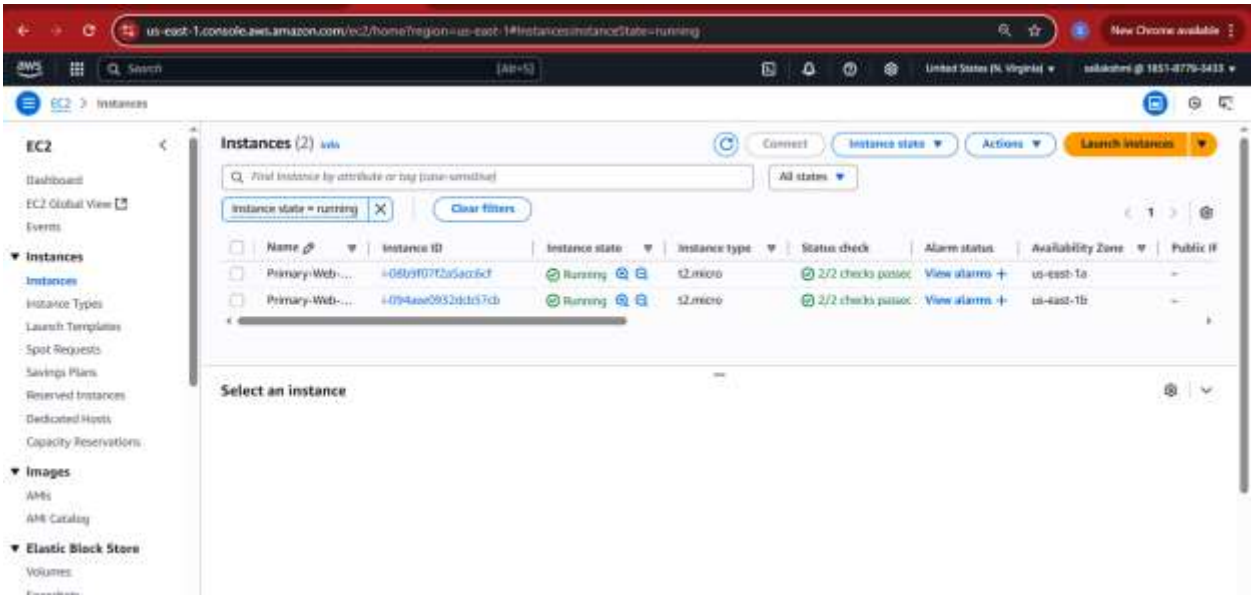
Route table



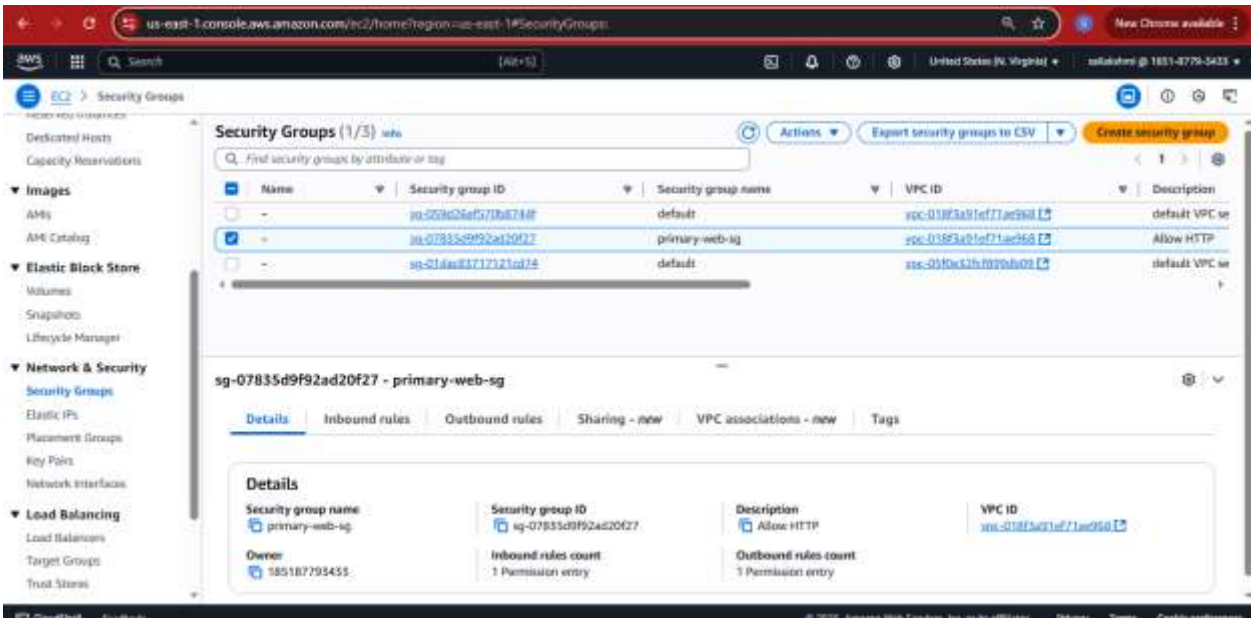
Internet gateway



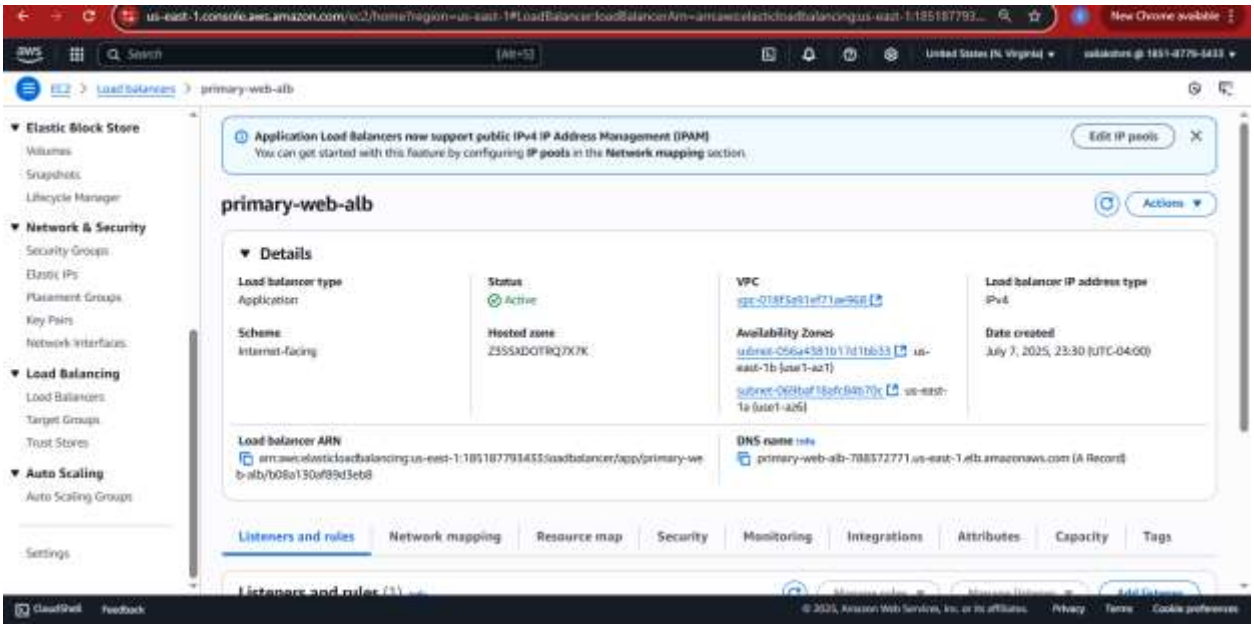
EC2 instances got created



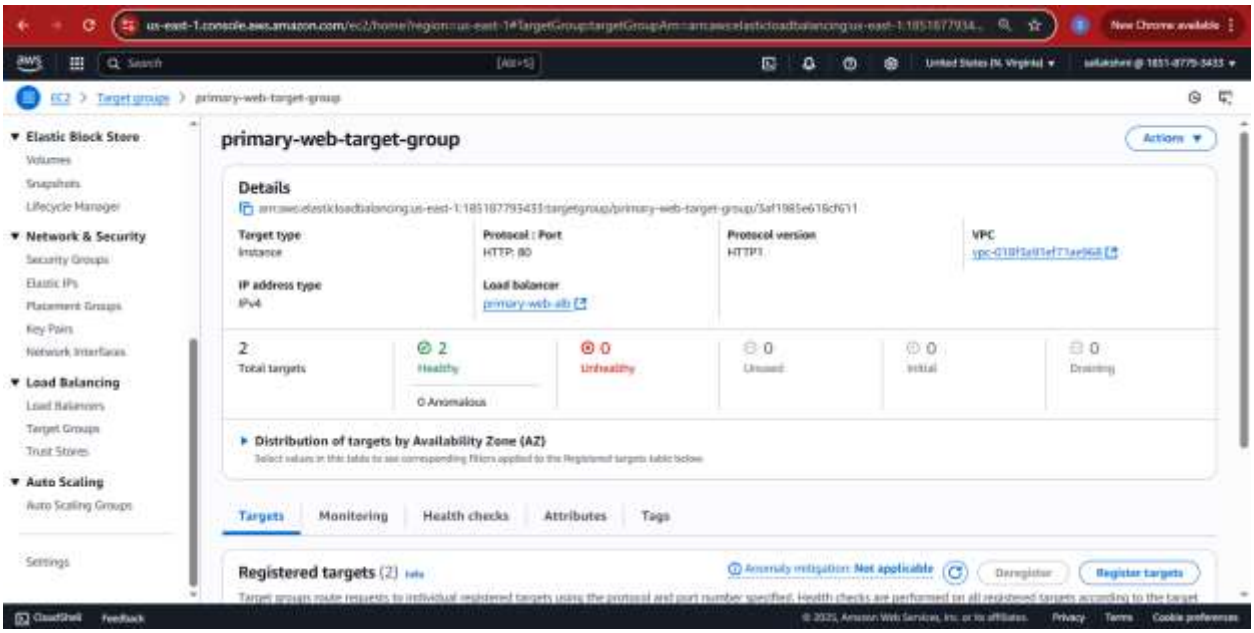
Security group

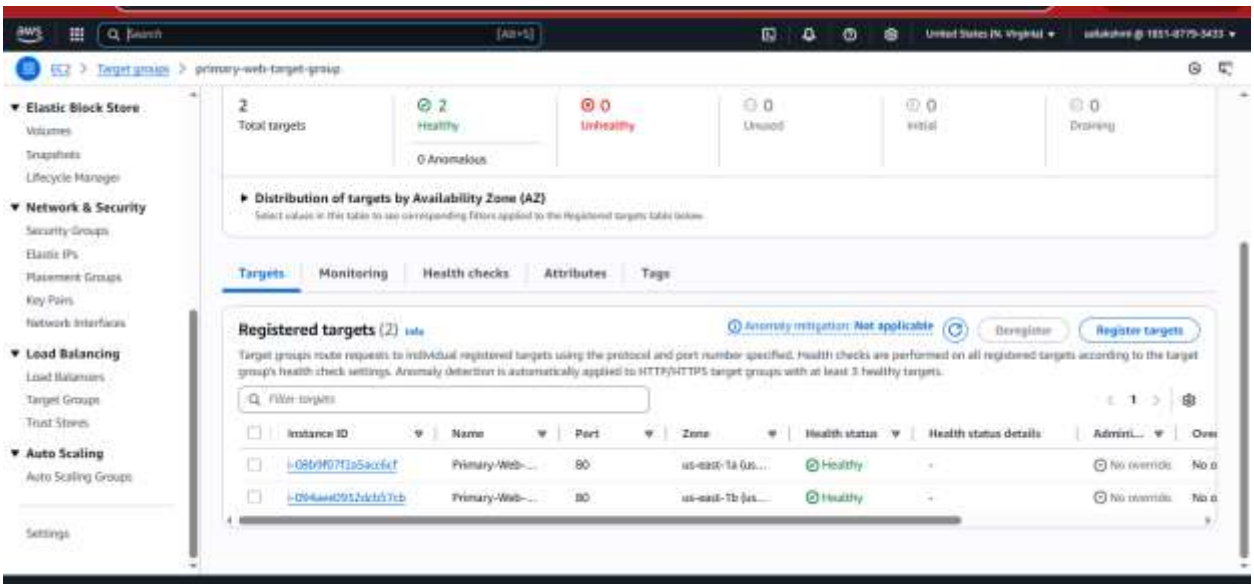


Load balancer

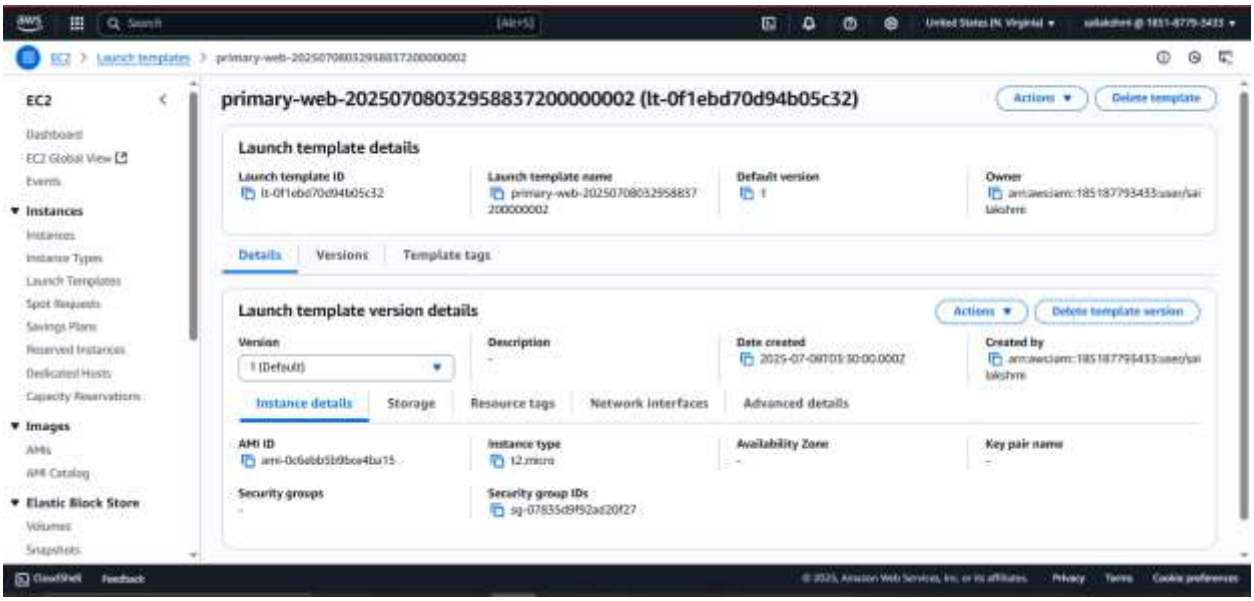


Target group

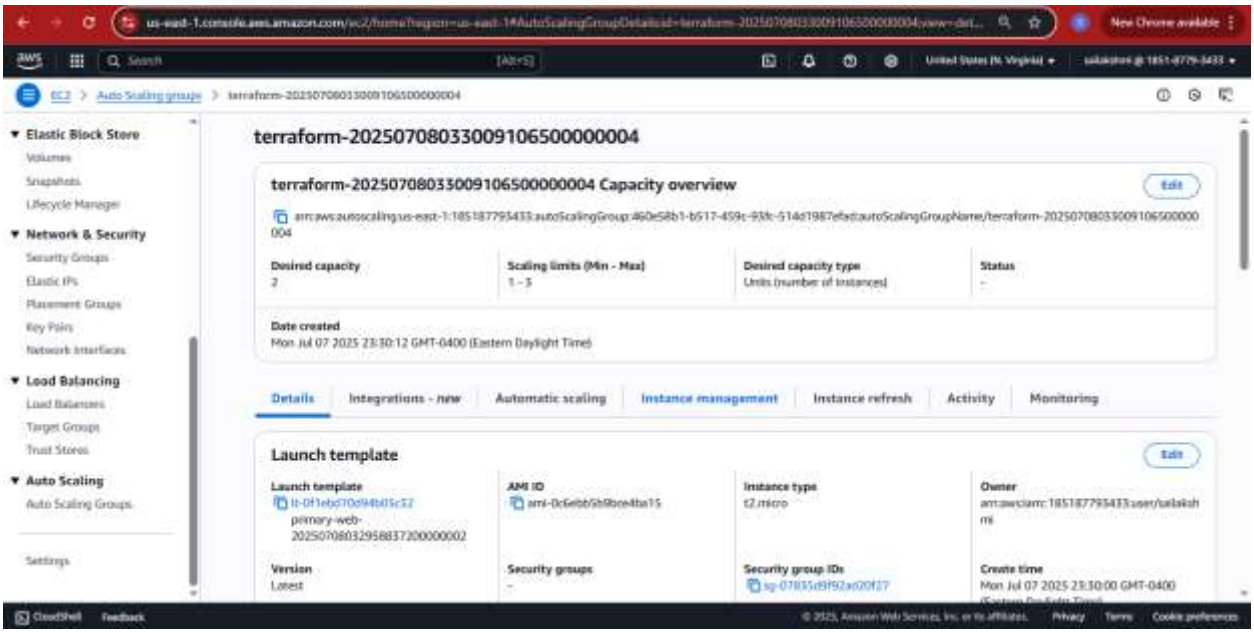




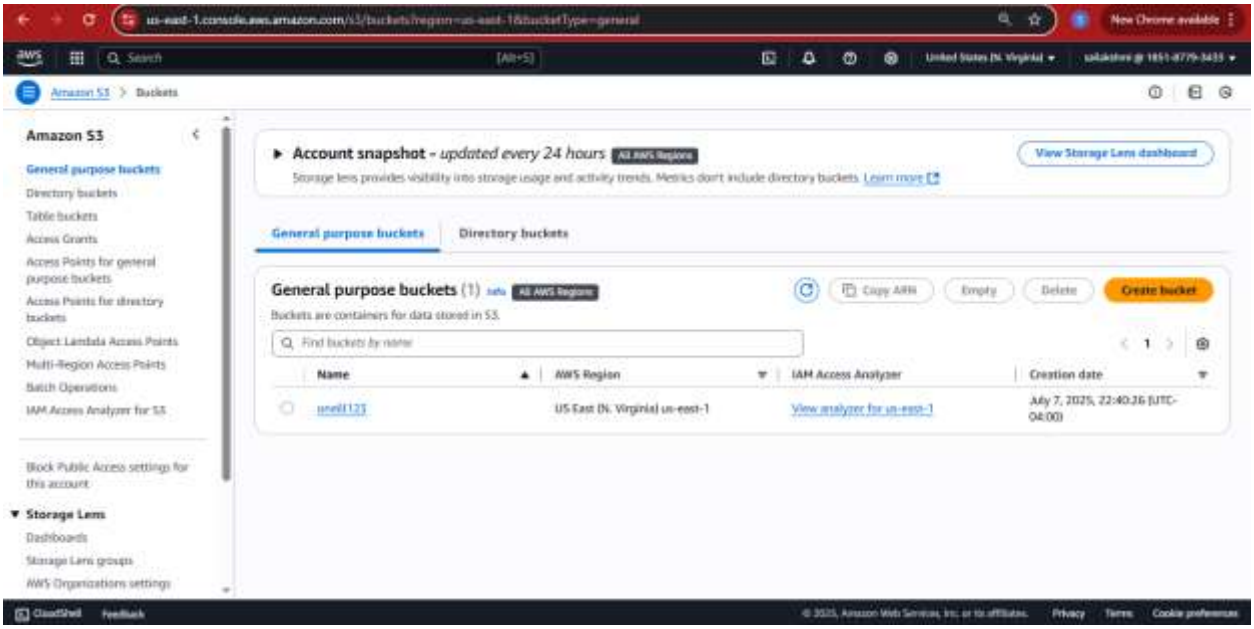
Launch template



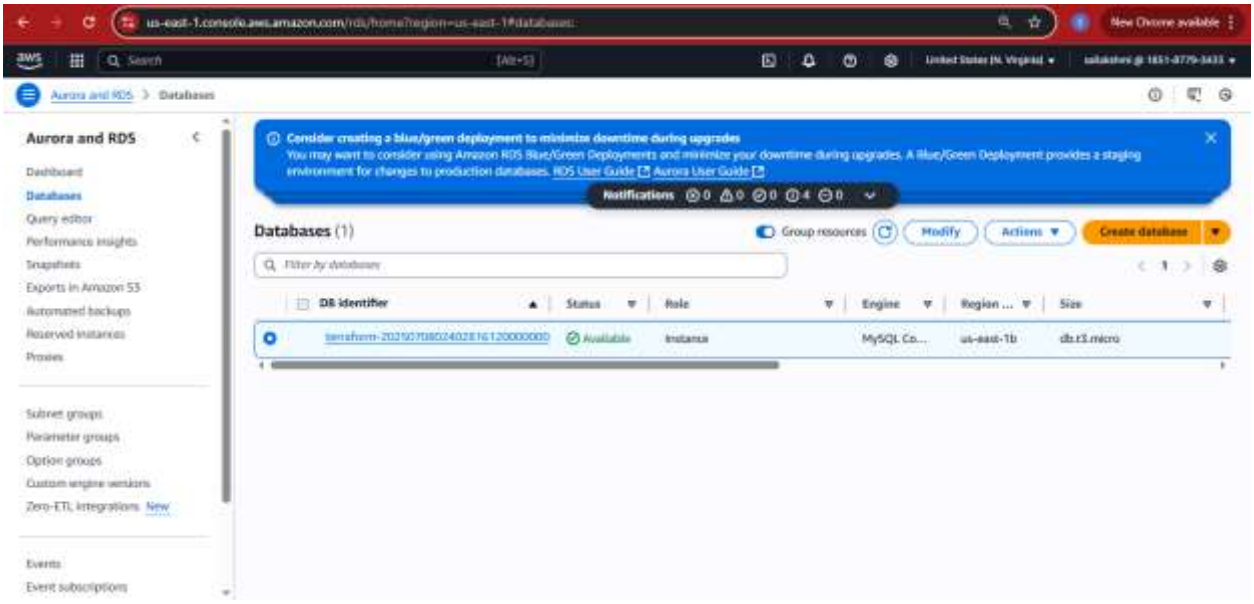
Auto scaling group



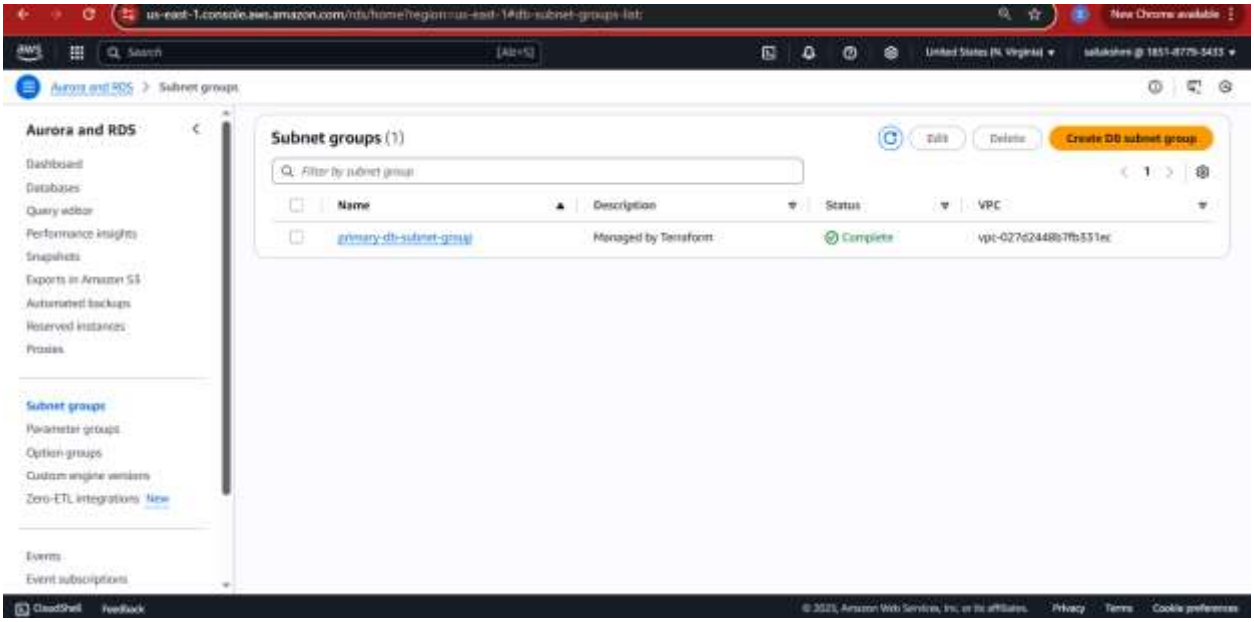
S3 bucket created



Primary database

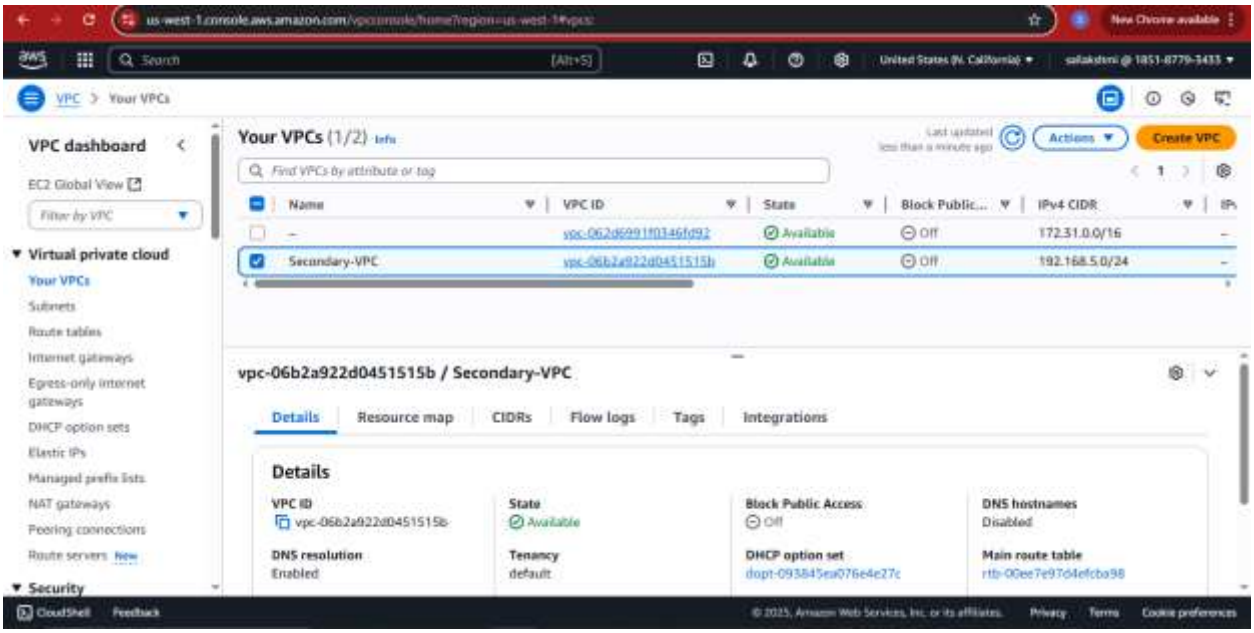


Db subnet group

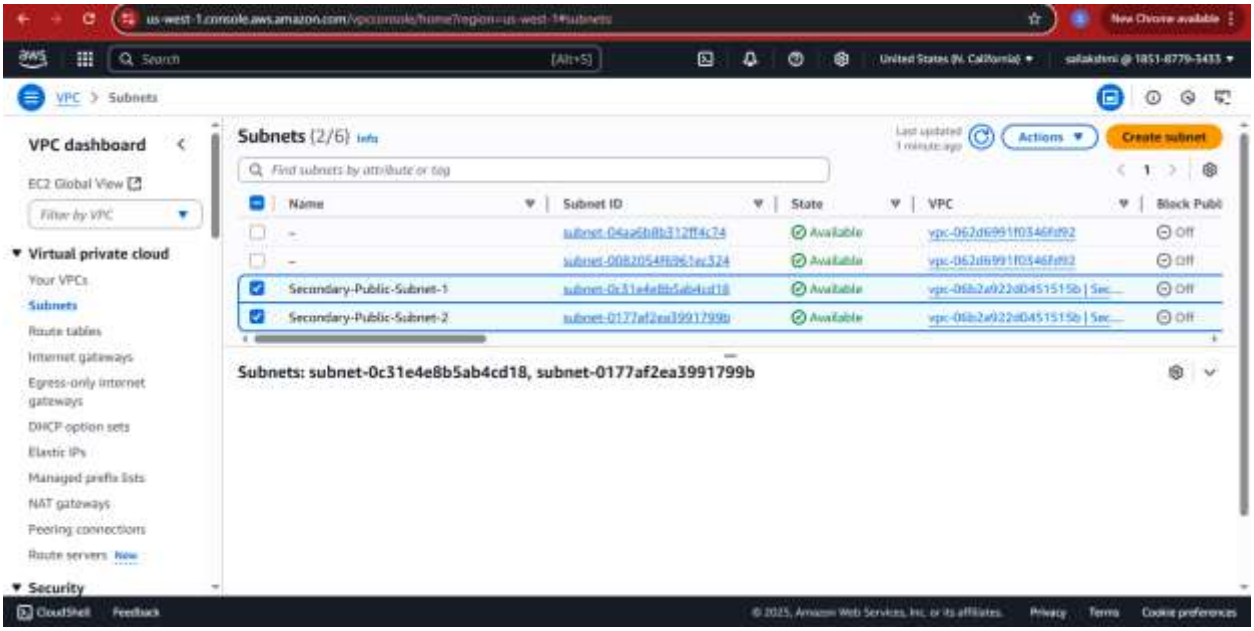


Secondary region

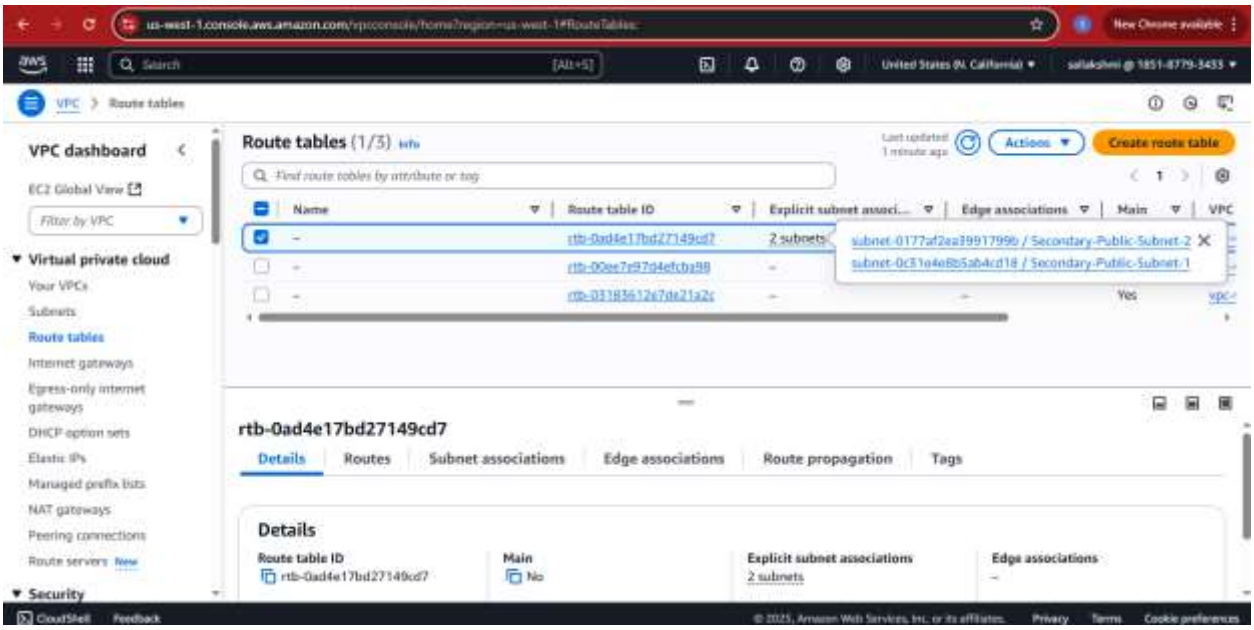
VPC created



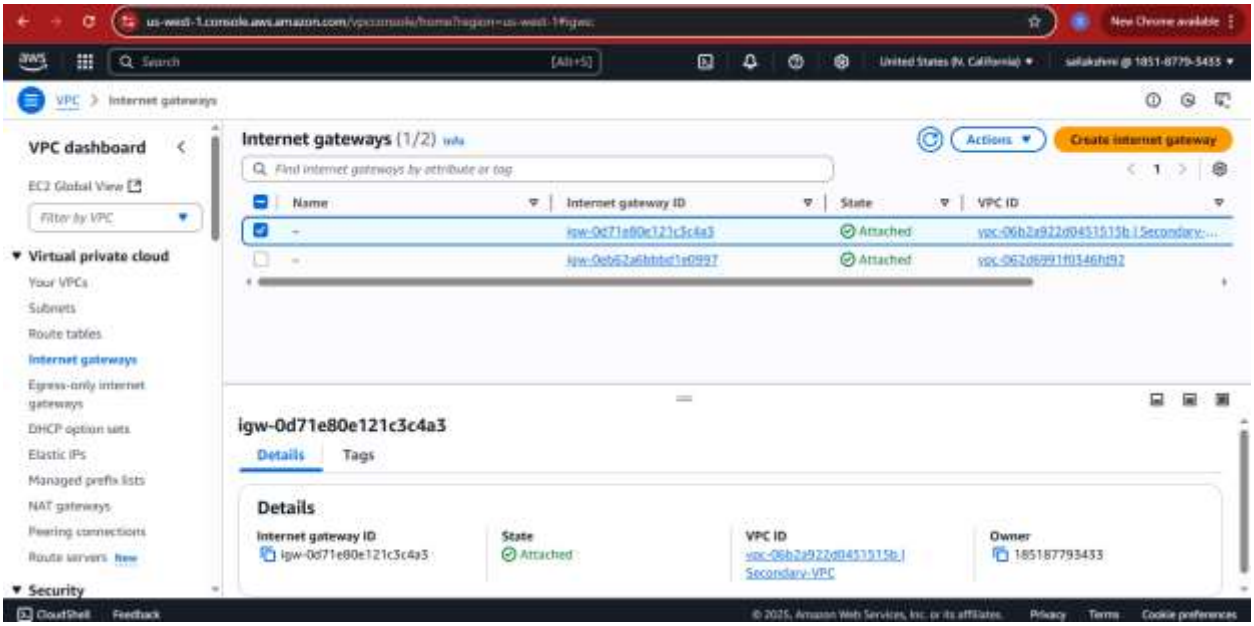
Subnets created



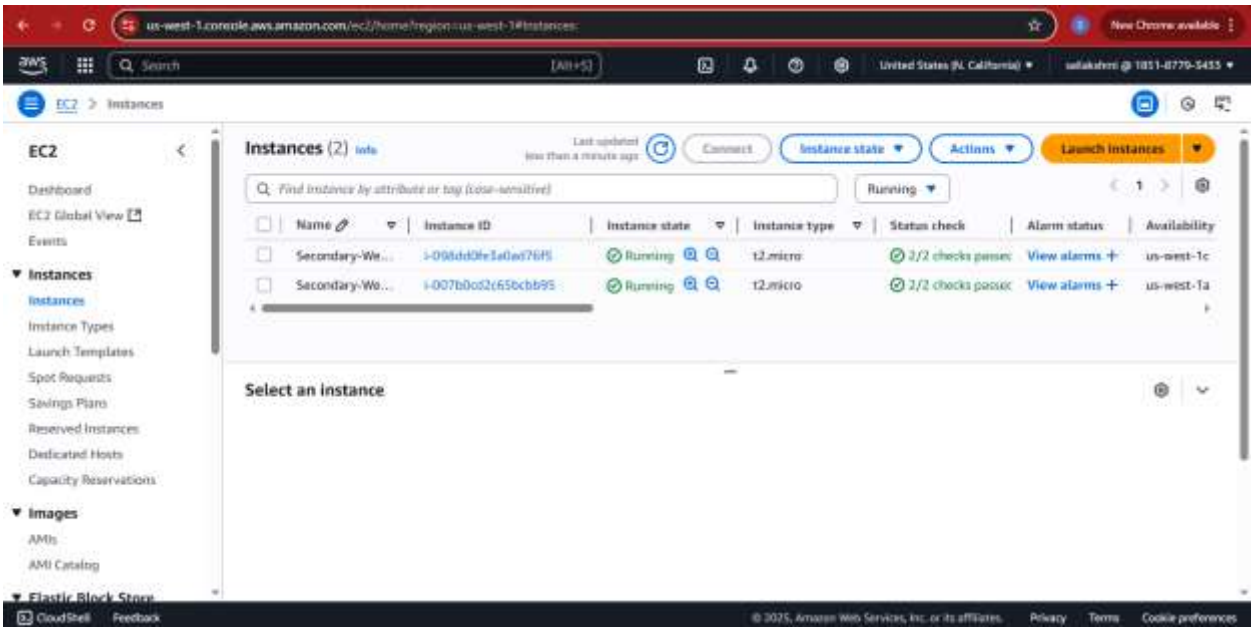
Route table created



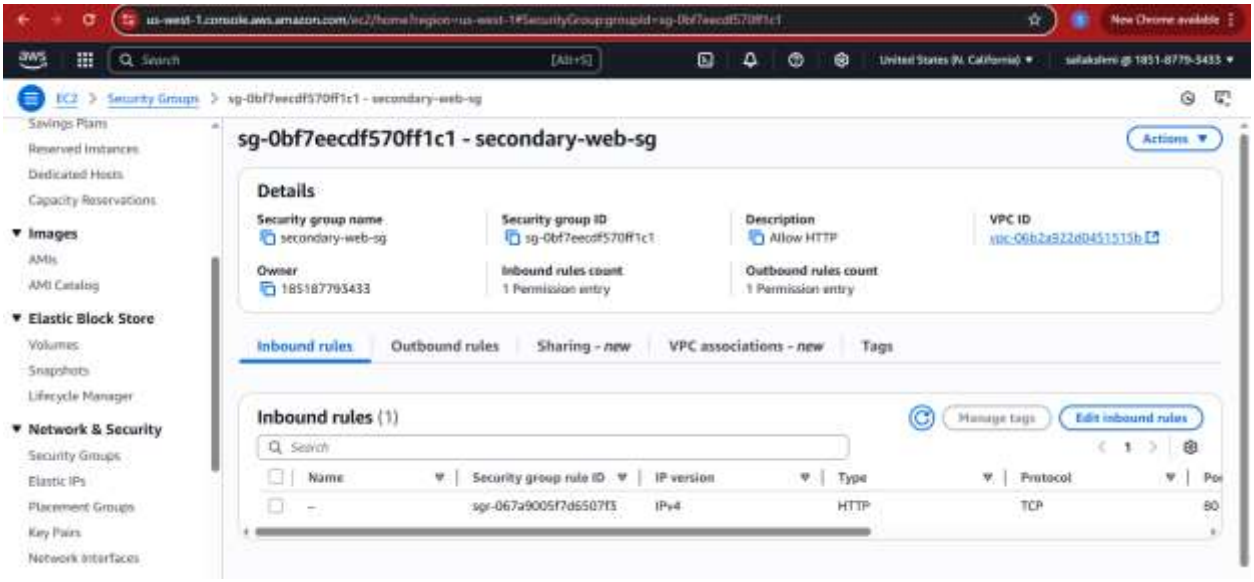
Internet gateway



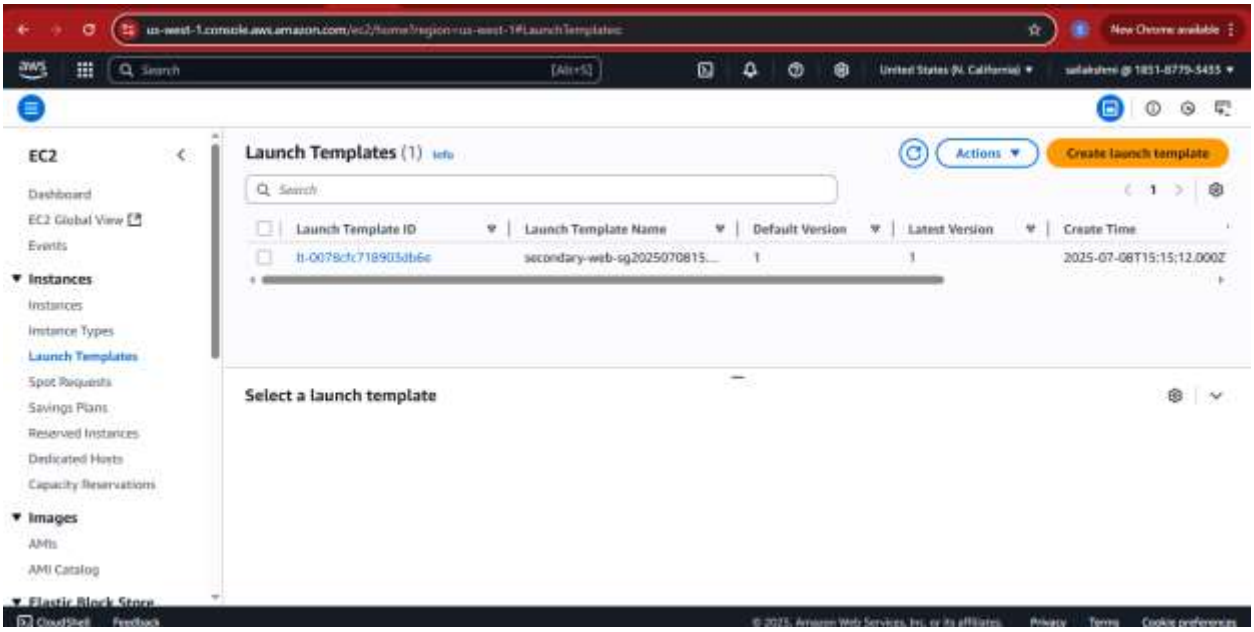
EC2 instance



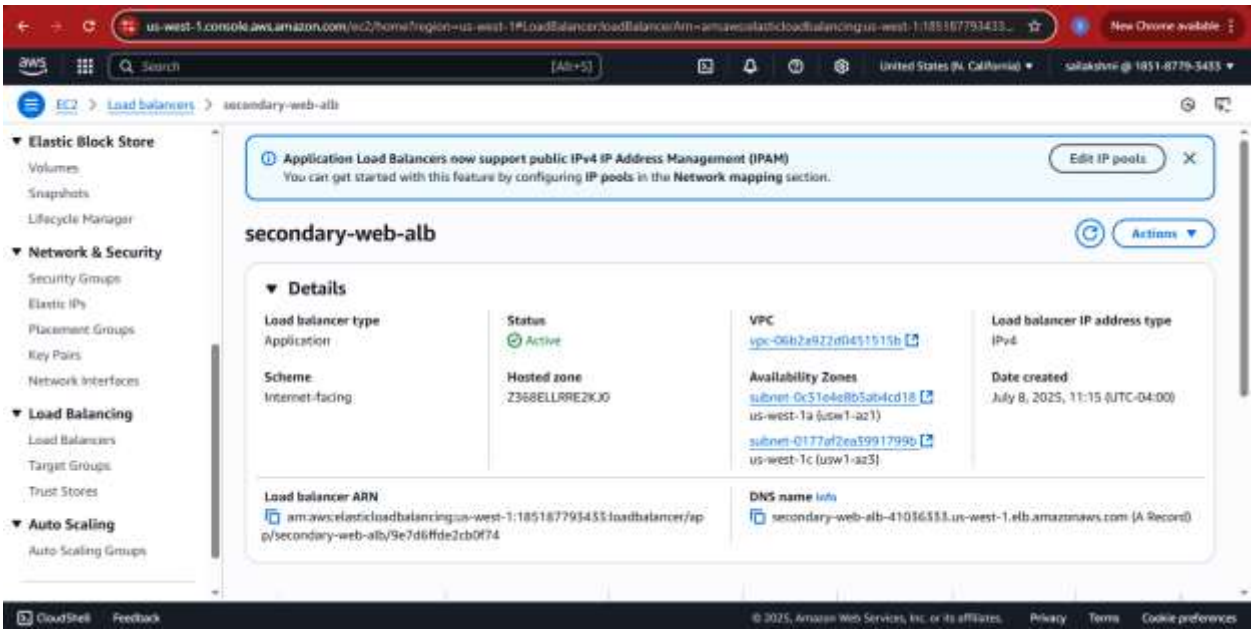
Security group



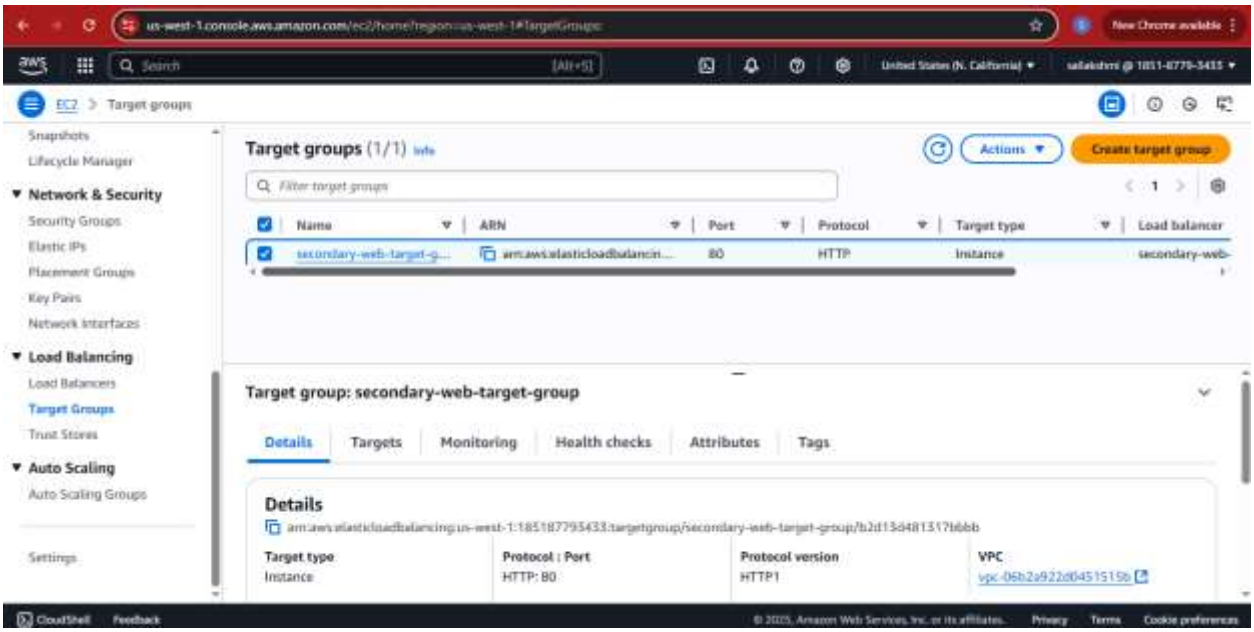
Launch template



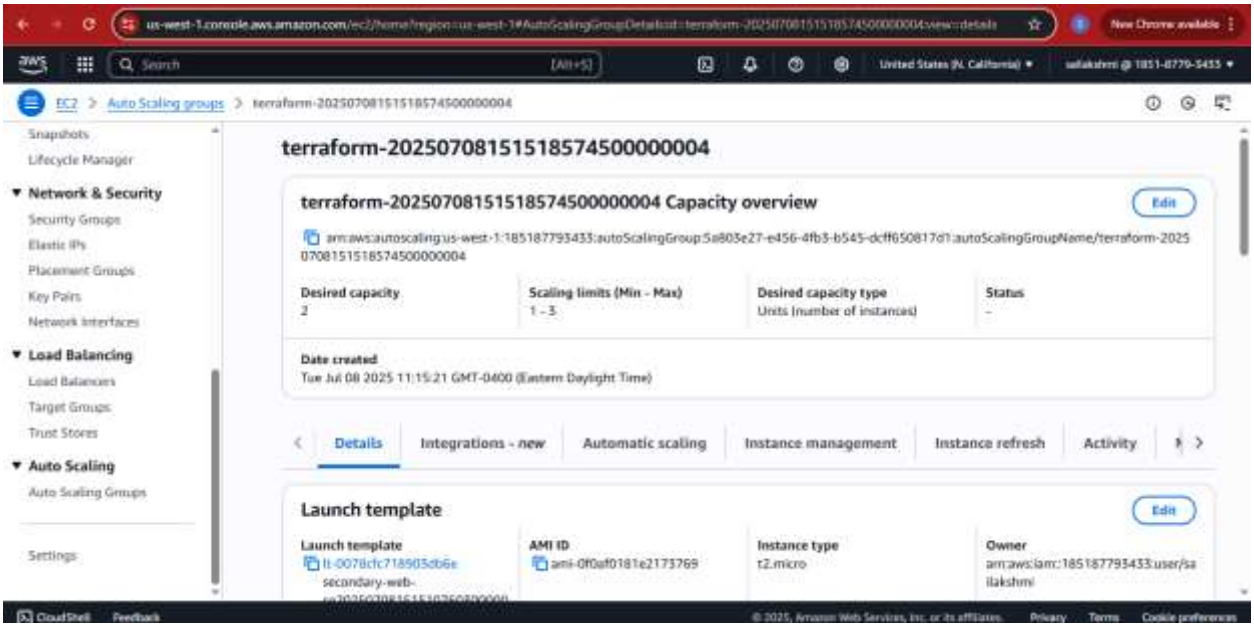
Load balancer



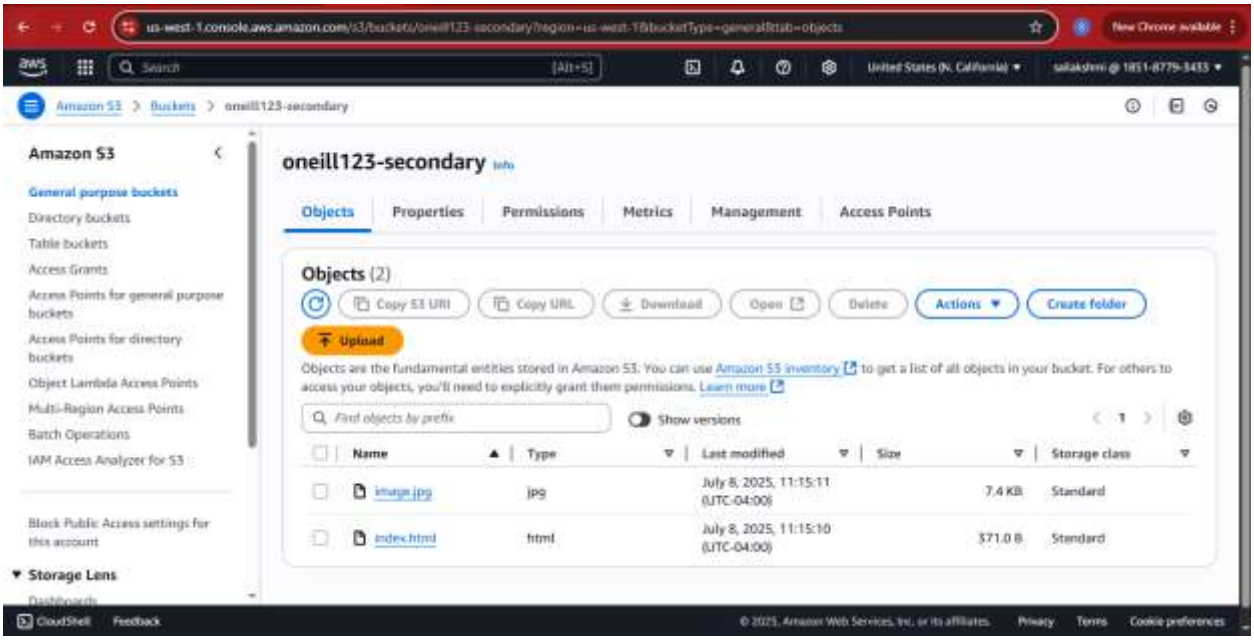
Target group



Autoscaling group created



S3 bucket created



Output check the dns name of primary load balancer in browser

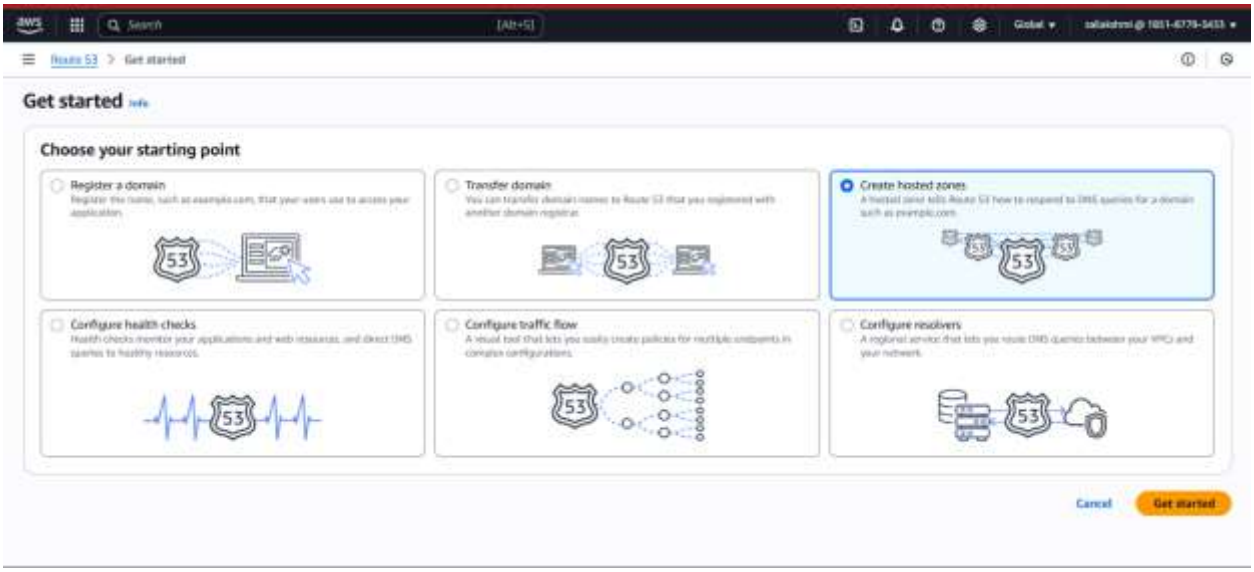
http://primary-web-alb-401762522.us-east-1.elb.amazonaws.com/

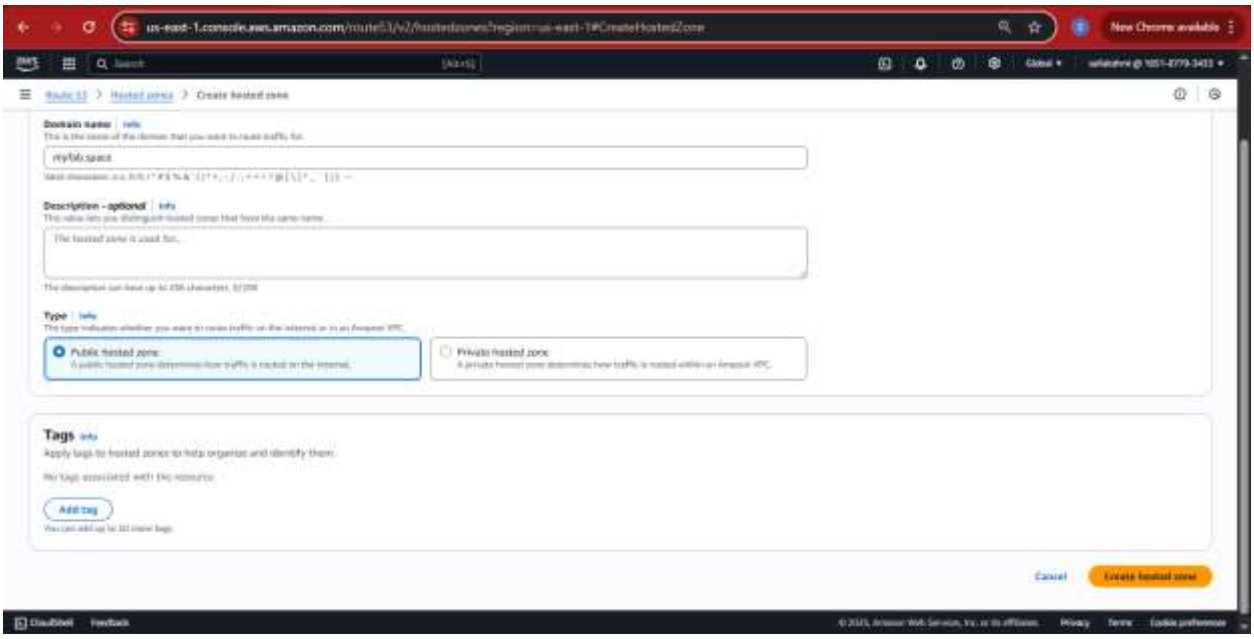
Secondary region

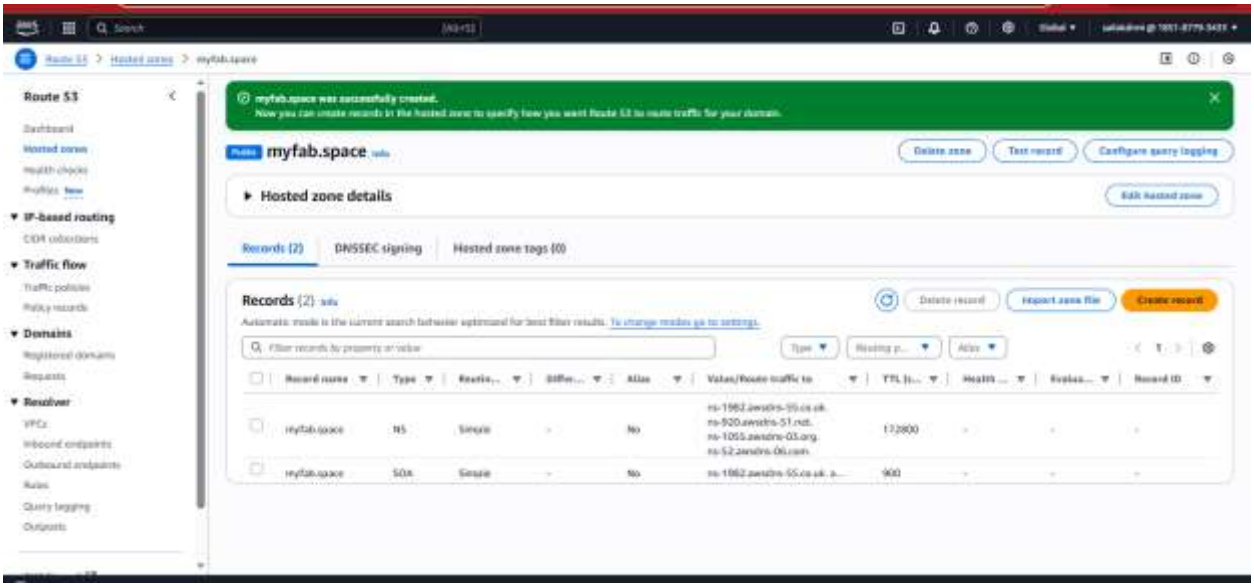
http://secondary-web-alb-810409321.us-west-1.elb.amazonaws.com/

Route 53

- Create a Hosted Zone in Route 53
- Go to AWS Console → Route 53 → Hosted Zones
- Click “Create hosted zone”
- Domain name: myfab.space
- Type: Public hosted zone
- Click Create
- You’ll now see 4 NS records (like ns-123.awsdns-45.com, etc.)







- Update Nameservers in where you buyed
- Go to Domain List → Click “Manage” on myfab.space
- Scroll to Nameservers
- Choose: Custom DNS
- Paste the 4 NS values from Route 53 here
- Save changes

Get ALB DNS Names from Terraform Outputs

primary_alb_dns = "primary-web-alb-401762522.us-east-1.elb.amazonaws.com"

secondary_alb_dns = "secondary-web-alb-810409321.us-west-1.elb.amazonaws.com"

Create Route 53 Health Check (for Primary ALB)

Go to Route 53 → Health Checks → Create Health Check

Name: primary-alb-health

Endpoint type: Public endpoint

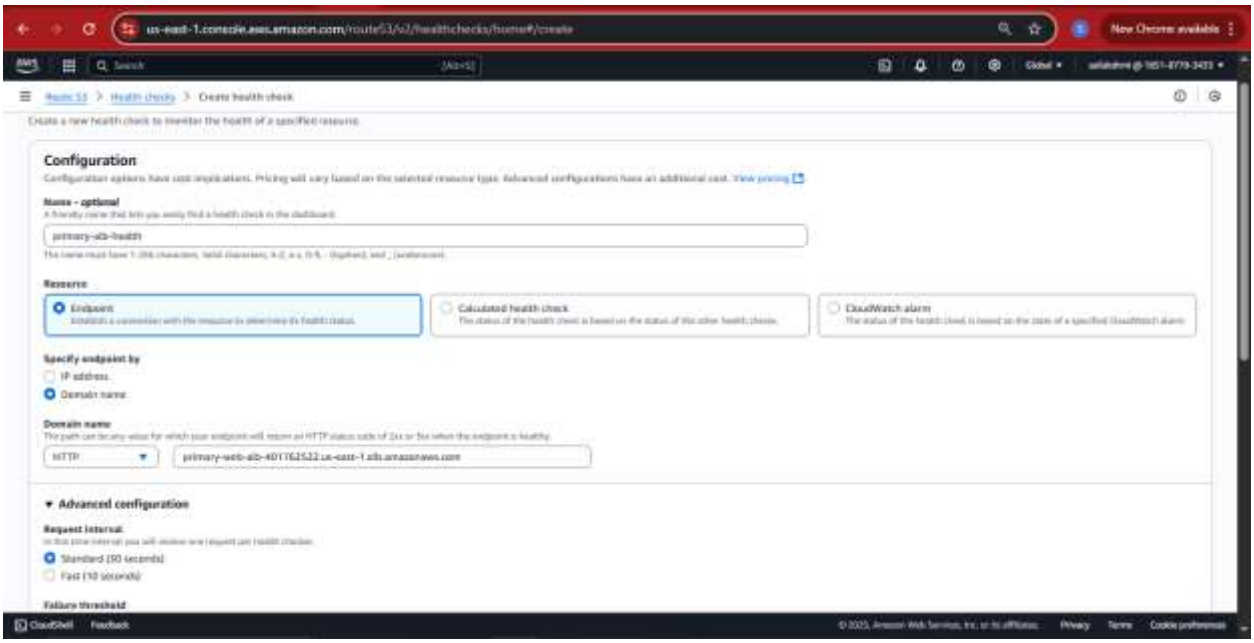
Protocol: HTTP

Domain name: paste primary ALB DNS (e.g., primary-web-alb-xyz.us-east-1.elb.amazonaws.com)

Port: 80

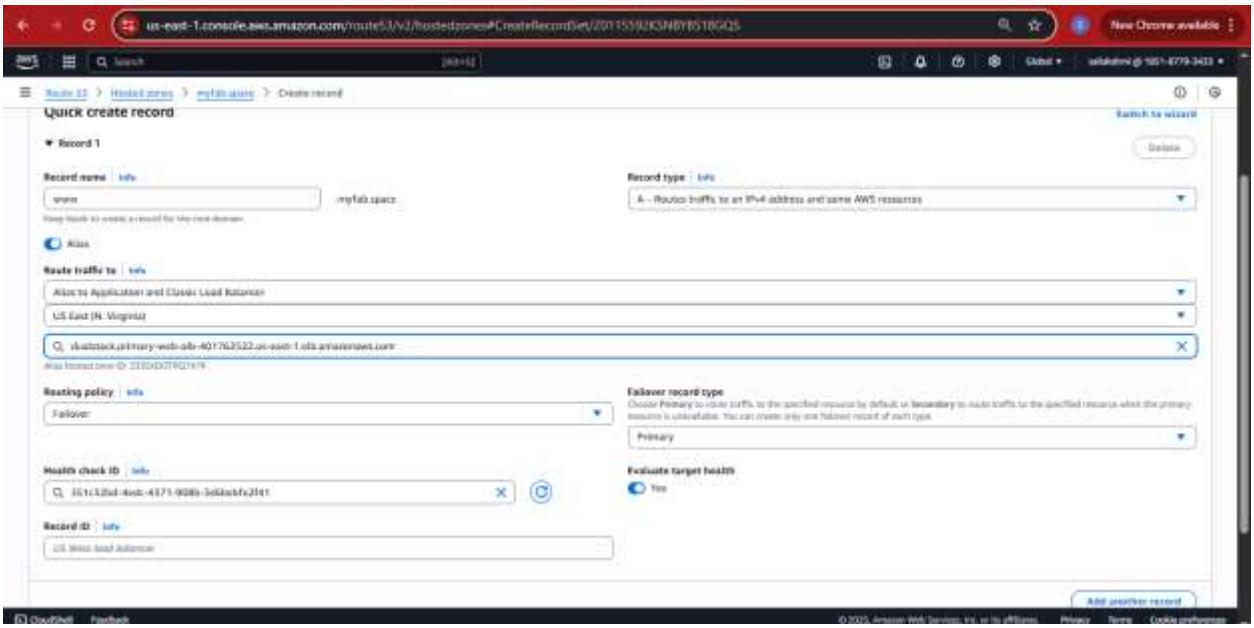
Path: /

Advanced settings (leave defaults), click Create



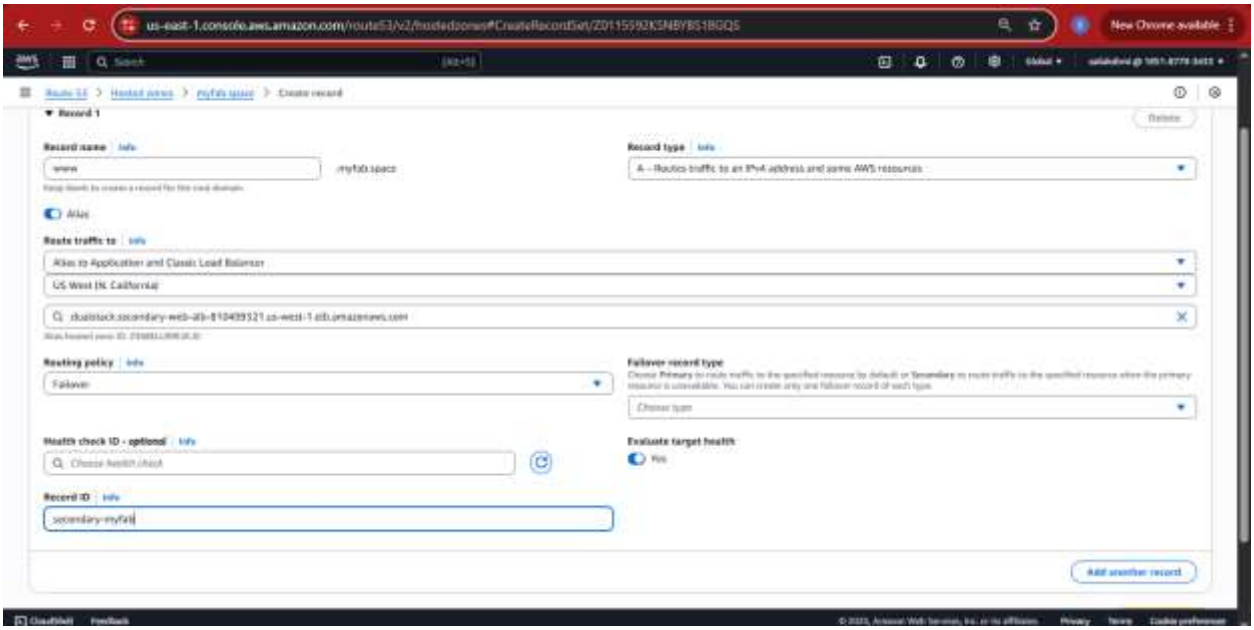
Create Route 53 Record Set – Failover (PRIMARY)

- Go to Route 53 → Hosted Zones → myfab.space
- Click “Create Record”
- Record name: leave blank (for root domain) or enter www if you want www.myfab.space
- Record type: A – IPv4 address
- Alias: Yes
- Alias target: Select Primary ALB
- Routing policy: Failover
- Failover type: Primary
- Attach Health Check: select the one you created
- Click Create records



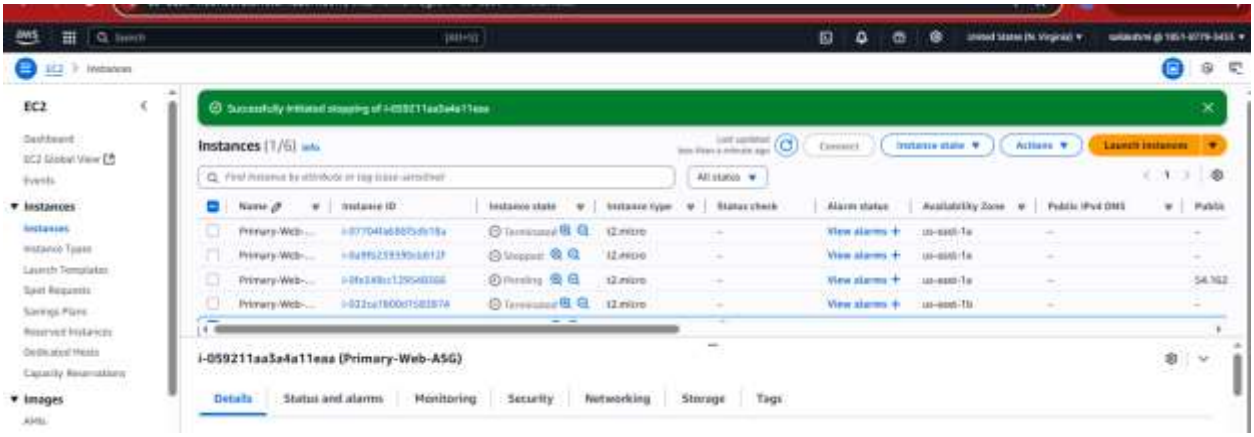
Create Route 53 Record Set – Failover (SECONDARY)

- Click “Create Record” again
- Same name: blank or www (must match above)
- Type: A – IPv4 address
- Alias: Yes
- Alias target: Select Secondary ALB
- Routing policy: Failover
- Failover type: Secondary
- No health check needed
- Click Create records



Test it

- Visit www.myfab.space
- It should load from Primary ALB
- Simulate failure by stopping EC2s in Primary ASG
- Wait 1–2 minutes → Route 53 routes to Secondary ALB



From secondary ALB it loaded