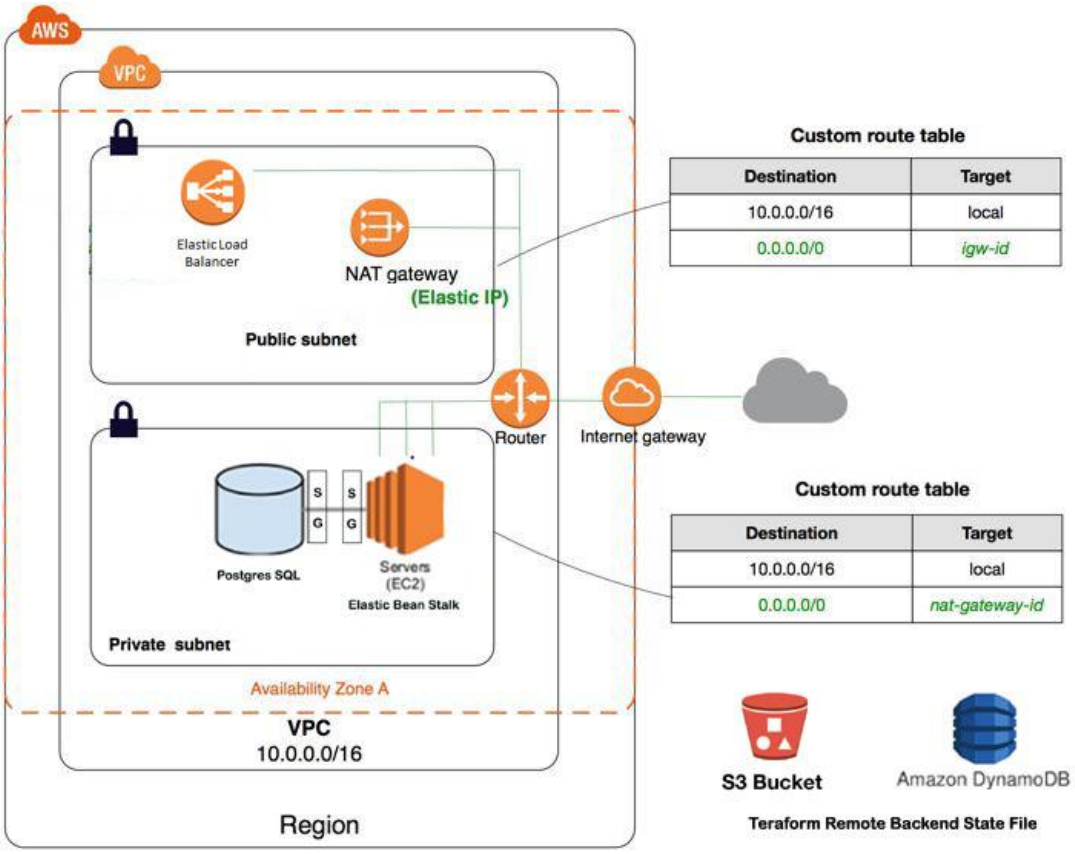
ARCHITECTURE



For Rest API

- Spring boot java application deployed to AWS ElasticBeanstalk
- Database is AWS RDS (PostgreSQL)
- Configure Spring profiles for dev, test, prod

Terraform (Infrastructure As Code)

Backend -Remote state file

Terraform State file is stored in S3 bucket.

AWS Dynamo DB to maintain locks.

AWS Elastic bean stalk - To deploy web applications to development environment

use free tier and default configurations. Consider the below options for high availability and resilient environment.

Load Balancer options (default Classic Load balancer)

Enable cross zone Load balancer

Enable path patterns

Autoscaling Policies

Scale based on a schedule (high use of resources during regular business hours and low use of resources overnight)

Scale based on demand(CPU utilization, Network bandwidth)

CloudWatch

Monitor metrics

Alarms to send notifications

Metrics to trigger autoscaling

Enable detailed monitoring to get metric data for instances at 1-minute frequency.

Configure rolling updates for any platform updates

Postgres SQL - for DB

Multi Availability zones, Read replicas

point-in-time restores and backups

Configure DB instance to take automated backups, or take manual snapshots, and then restore instances from the backups or snapshots.

Enable retention for backups

Amazon RDS event notification for failovers.

Jenkins Pipeline As Code

Build Spring boot applications

Create/Destroy Infrastructure

Deploy Spring boot applications