Denzel Gustave Deployment 7

Launched Ubuntu EC2 instance with ports:

SSH: 22

HTTP: 8080

Install Docker:

```
sudo apt update
sudo apt install software-properties-common ca-certificates curl gnupg-agent apt-transport-https

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add –

sudo add-apt-repository \

"deb [arch=amd64] https://download.docker.com/linux/ubuntu \
$(lsb_release -cs) \

stable"
```

sudo apt update

sudo apt install docker-ce docker-ce-cli containerd.io

Permissions:

sudo usermod -aG docker ubuntu

Download, install and configure AWS CLI:

curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip" sudo apt-get install unzip unzip awscliv2.zip sudo ./aws/install configure aws (Using Access Key)

Install Java:

sudo apt update sudo apt install default-jdk

Pull Docker image:

Docker pull Jenkins/Jenkins

Amazon ECR:

Create repository on Amazon ECR

Establish connection with Amazon ECR

Retag Jenkins Image with ECR URI

Docker Push to Amazon ECR

Create a cluster with networking only

Create a task definition with Fargate

Add container URI from Amazon ECR with port 8080 open

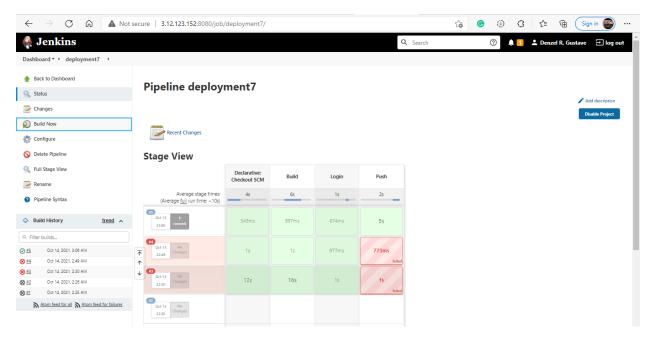
Run new task in previously created cluster (Fargate) in subnet of EC2 Instance

Open port 8080

Run task

Access Jenkins user:
Public-IP:8080
Setup Jenkins:
Install suggested plugins
Setup Jenkins login credentials
Installed Docker pipeline and Amazon EC2 Plugins
Add SSH, Github and Dockerhub credentials
Setup Jenkins agent with SSH credential
jenkins-ec2-agent
Create and upload Jenkinsfile to GitHub repository
Create Jenkins Pipeline and add git repository URL where Jenkinsfile is located
Errors Encountered:
Jenkinsfile:
Typo in docker Image tag
Misspelt agent name
DockerHub:
Repository did not exist
Fixes:
Corrected docker Image tag
Corrected agent name
Created appropriate DockerHub repository

Jenkins:



DockerHub:

