

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:

The screenshot shows the Jenkins web interface for a pipeline named 'deployment7'. The left sidebar contains navigation links: Back to Dashboard, Status, Changes, Build Now (highlighted), Configure, Delete Pipeline, Full Stage View, Rename, Pipeline Syntax, Build History (with a trend icon), and Atom feed for all/Atom feed for failures. The main area displays the 'Pipeline deployment7' title, a 'Recent Changes' icon, and a 'Stage View' table. The table shows stage execution times for four stages: Declarative: Checkout SCM, Build, Login, and Push. The 'Push' stage shows a failure for the last two builds.

	Declarative: Checkout SCM	Build	Login	Push
Average stage times: (Average <u>all</u> run times ~10s)	4s	6s	1s	2s
Oct 13 23:06 1 commit	545ms	997ms	674ms	5s
Oct 13 22:49 No Changes	1s	1s	977ms	773ms failed
Oct 13 22:30 No Changes	12s	16s	1s	1s failed
Oct 13 22:26 No Changes				

DockerHub:

The screenshot shows the DockerHub repository page for 'denzelgustave/javaapp'. The repository does not have a description. It was last pushed a few seconds ago. The 'Tags and Scans' section shows one tag, 'latest', with a vulnerability scan status of 'DISABLED'. The 'VULNERABILITY SCANNING - DISABLED' status can be enabled.

TAG	OS	PULLED	PUSHED
latest	linux/amd64	a few seconds ago	a few second...

[See all](#)