

Deploy a Amazon Linux Instance, Add http(80), https (443), 8080 in inbound port

Install HTTPD Server

```
yum update -y
```

```
yum install -y httpd
```

```
systemctl start httpd
```

```
systemctl enable httpd
```

Create a index.html file, add content, save it in /var/www/html/ folder

Check it by your public IP address

Install Jenkins

<https://www.jenkins.io/doc/tutorials/tutorial-for-installing-jenkins-on-AWS/>

```
sudo yum update -y
```

```
sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
```

```
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key
```

```
sudo yum upgrade -y
```

```
sudo dnf install java-17-amazon-corretto -y
```

```
sudo yum install jenkins -y
```

```
sudo systemctl enable jenkins
```

```
sudo systemctl start jenkins
```

```
sudo systemctl status jenkins
```

Go to ipaddress:8080

```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

Install default plug-ins

Enter password

Install Apache Server

```
yum update -y
```

```
yum install -y httpd
```

```
systemctl start httpd
```

systemctl enable httpd

sudo su

echo "<h1>Hello from PIIT from \$(hostname -f)</h1>" > /var/www/html/index.html

Install git

yum install git -y

Create Jenkins Pipeline

Click New Item1 > Enter name, select Freestyle project

scroll down, select git, copy and paste the repo URL

Enter main or master branch

Scroll down and select GitHub hook trigger for GITScm polling

Scroll down to select apply /save

Go to GitHub account and create webhook

Go to the GitHub Repo

Select Settings, Select Webhooks

Click Add

Enter jenkinsurl:8080/github-webhook/

Select content type application/json

Which events: let me select

Pull and Pushes

Save

Add a file and GitHub and pipeline will start building

Go to Server and add necessary permission

```
ls -la /var/www/html/ (only root has permissions)
```

```
ls -al /var/www/html/
```

```
sudo groupadd www-data
```

```
sudo newgrp www-data
```

```
sudo chown jenkins:www-data /var/www/html/
```

```
ls -al /var/www/html/
```

```
sudo chown jenkins:www-data -R /var/www/html/
```

```
ls -al /var/www/html/
```

```
sudo chmod 2771 /var/www/html/
```

```
sudo chown -R jenkins:www-data /var/www/html
```

```
sudo chmod -R 755 /var/www/html
```

```
ls -al /var/www/html/
```

Go to pipeline

Select configure

Select Build Steps

Click Execute shell and add the command below

```
rm -rf /var/www/html/*
```

```
cp * -r /var/www/html
```

Edit code in Git or GitHub, and push it to test

Pipeline will start the build automatically and deploy it to WebServer

VIM Editor

Press : (colon) to open the prompt bar in the bottom left corner of the window.

Type q! after the colon and hit Enter to exit without saving the changes