

```
pipeline {
  agent any
```

```

    stages {
    stage('scm') {
    steps {
        git branch: 'main', url: https://github.com/DEBEHAA/simple-web-app.git
        }
    }
        stage('build') {
    steps {
        sh "mvn
clean"      sh "mvn
install"
    }
    }
    stage('build to images') {
        steps {
    script{
        sh 'docker build -t DEBEHAA/simplewebapp .'
        }
    }
    }
    stage('push to hub') {
        steps {
    script{
        withDockerRegistry(credentialsId: 'Docker_cred', url: 'https://index.docker.io/v1/') {
    sh 'docker push DEBEHAA/simplewebapp'
        }
        }
    }
    }

    stage('Deploy Web App') {
        steps {
            withKubeConfig(caCertificate: '', clusterName: 'minikube', contextName: 'minikube',
credentialsId: 'config_id', namespace: '', restrictKubeConfigAccess: false, serverUrl:
'https://192.168.39.226:8443') {
            sh 'kubectl apply -f deployment.yml --validate=false'
        }
    }
    }
    }
    }
    }

```

## DEPLOYMENT FILE deployment.yml

apiVersion: apps/v1

kind: Deployment

metadata: name:

webnginx2

labels:

name: webnginx2

spec: replicas: 1

selector:

matchLabels:

apptype: web-backend

strategy:

type: RollingUpdate

template:

metadata:

labels:

apptype: web-backend

spec:

containers:

- name: webnginx2 image: DEBEHAA/simplewebapp:latest

ports:

- containerPort: 7070

---

apiVersion: v1 kind:

Service

metadata:

name: my-service

labels:

app: my-service

type: backend-app

spec:

type: NodePort

ports:

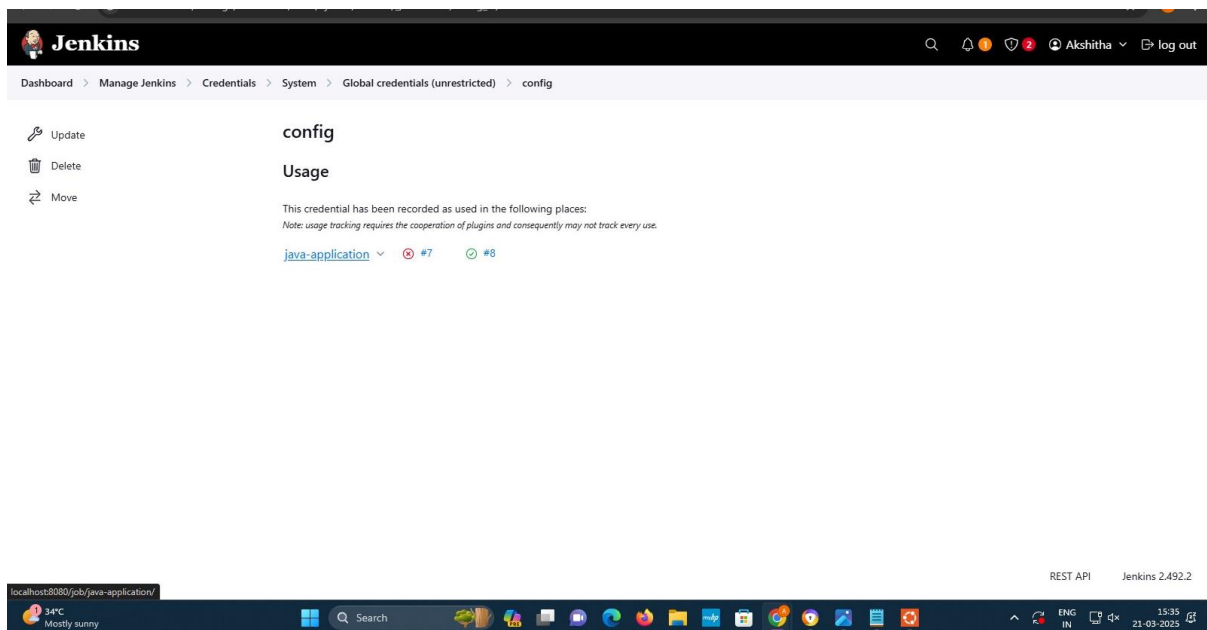
- targetPort: 8080

port: 7070    nodePort:

30002 selector:

apptype: web-backend **deployment.yml**

## CREATION OF CREDENTIALS



The screenshot displays the Jenkins web interface. At the top, the Jenkins logo and navigation links are visible. The breadcrumb trail indicates the current location: Dashboard > Manage Jenkins > Credentials > System > Global credentials (unrestricted) > config. On the left sidebar, there are three action buttons: 'Update' (with a wrench icon), 'Delete' (with a trash icon), and 'Move' (with a double arrow icon). The main content area is titled 'config' and 'Usage'. It states: 'This credential has been recorded as used in the following places:'. Below this, a note reads: 'Note: usage tracking requires the cooperation of plugins and consequently may not track every use.' A dropdown menu shows 'java-application' with a downward arrow, followed by two colored circles with numbers: a red circle with '#7' and a green circle with '#8'. At the bottom of the screenshot, a Windows taskbar is visible with the address bar showing 'localhost:8080/job/java-application/'. The system tray shows the date and time as '21-03-2025 15:35'.

## CONNECTING TO KUBERNETES

Dashboard > Manage Jenkins > Clouds > Kubernetes > Configure

Kubernetes Namespace

Agent Docker Registry

☐ Inject restricted PSS security context in agent container definition

Credentials

config

+ Add

Connected to Kubernetes v1.32.0

Test Connection

☐ WebSocket

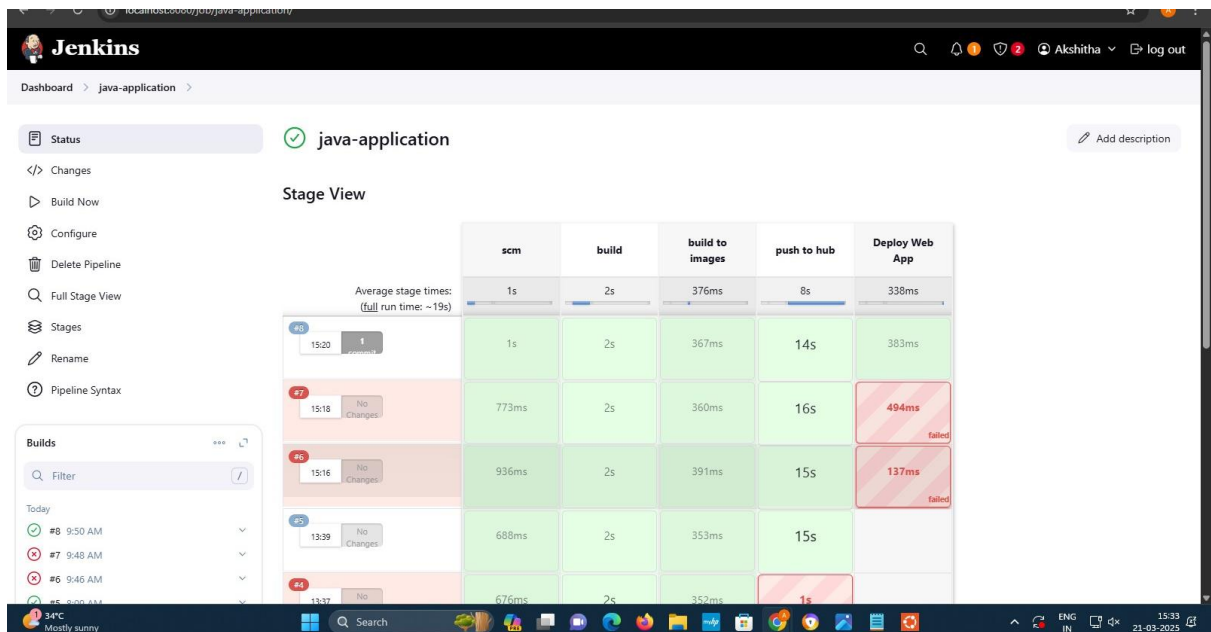
☐ Direct Connection

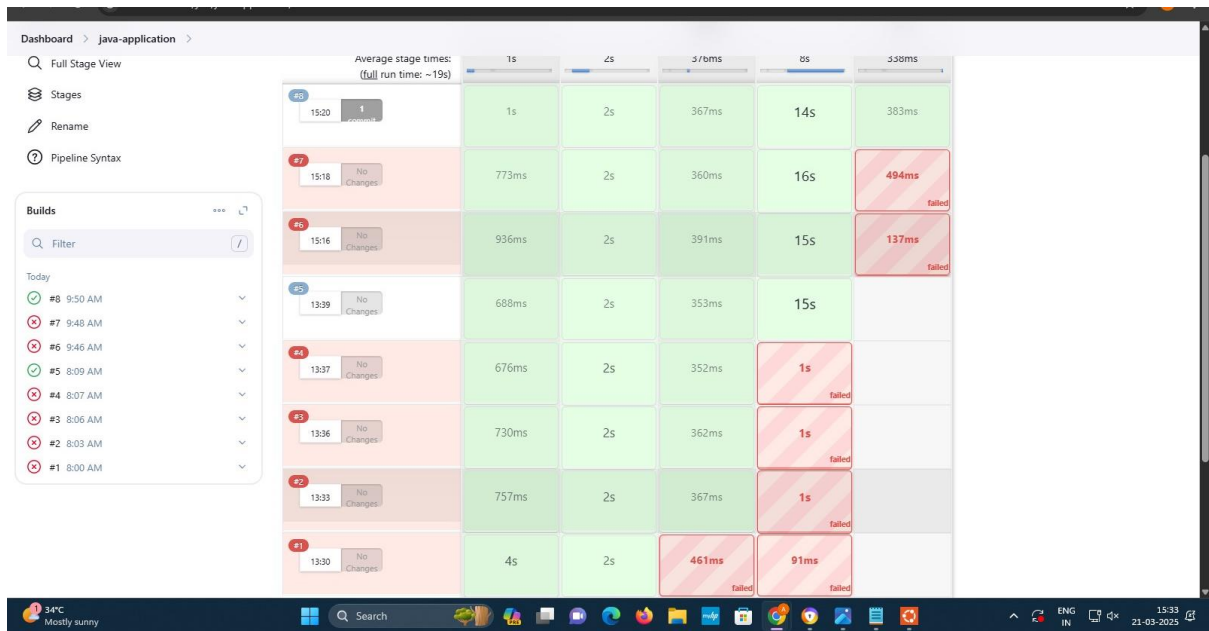
⚠️ 'TCP port for inbound agents' is disabled in Global Security settings. Connecting Kubernetes agents will not work without this or WebSocket mode!

Jenkins URL

Save Apply

## STAGE VIEW OF BUILD





## BUILD SUCCESS

Jenkins

Dashboard > java-application > #8

Status

#8 (Mar 21, 2025, 9:50:44 AM)

Add description

Keep this build forever

Started by user Akshitha

Started 19 min ago  
Took 19 sec

This run spent:

- 6 ms waiting;
- 19 sec build duration;
- 19 sec total from scheduled to completion.

Revision: 837fed54fe87aba876eb01a154c59657398cd159

Repository: <https://github.com/Akshi1910/simple-web-app.git>

- refs/remotes/origin/main

Changes

- deployment.yml ([details](#) / [githubweb](#))

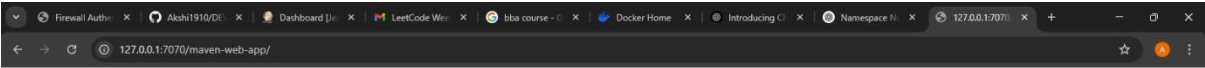
PGA Round 2 Live

Search

ENG IN

15:40 21-03-2025





**Hello World!**

