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-  _____



CI

graph LR

A[] --> B[CI]

B --> C[]

C --> D[]

D --> E[]

E --> F[]

F --> G{ ? }

G --> H[/]

G --> I[]

H --> J[]

J --> K[/]

K --> L[]



1. [] [] Git Hook[]
2. [] [] Docker[]
3. [] []
 - []
 - []
 - E2E[]
4. [] [] Docker[] JAR[] Nexus[] Harbor[]
5. [] []



1 GitHub Actions

```

# .github/workflows/ci.yml
name: CI Pipeline
on: [push]
jobs:
  build-and-test:
    runs-on: ubuntu-latest
    steps:
      - uses: actions/checkout@v4

```


📄 Jenkins 📄📄📄

📄📄📄 **Jenkins** 📄📄 📄📄📄📄📄 📄📄📄📄📄📄📄📄 📄 📄📄📄📄 📄📄📄
Linux/Windows 📄📄

1. 📄📄 Jenkins

Linux (Ubuntu/CentOS)

```
# 📄 Java (Jenkins 📄 )
sudo apt update && sudo apt install openjdk-11-jdk -y # Ubuntu
sudo yum install java-11-openjdk -y # CentOS

# 📄 Jenkins 📄📄📄
curl -fsSL https://pkg.jenkins.io/debian/jenkins.io.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc >
/dev/null
echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] https://pkg.jenkins.io/debian binary/" | sudo tee
/etc/apt/sources.list.d/jenkins.list > /dev/null
sudo apt update && sudo apt install jenkins -y

# 📄 Jenkins
sudo systemctl start jenkins
sudo systemctl enable jenkins
```

Windows

1. 📄📄 [Jenkins Windows Installer](#) 📄📄
 2. 📄📄📄📄📄 📄
-

2. 📄📄📄📄

1. 📄📄 **Jenkins**

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```

    steps {
        git 'https://github.com/your-repo.git'
    }
}
stage('Build') {
    steps {
        sh 'mvn clean package'
    }
}
stage('Test') {
    steps {
        sh 'mvn test'
    }
}
stage('Deploy') {
    steps {
        sh 'docker build -t myapp .'
        sh 'docker push myrepo/myapp'
    }
}
}
}
}

```

5. Docker Kubernetes

Docker

-  Jenkins  Docker  Jenkins  `docker` 

```

sudo usermod -aG docker jenkins
sudo systemctl restart jenkins

```

-  Pipeline  Docker 

```

stage('Docker Build') {
    steps {
        script {
            docker.build("myapp:${env.BUILD_ID}").push()
        }
    }
}

```


