

Jenkins CI Setup

1. Jenkins Installation

- Install Java: `sudo apt install openjdk-17-jdk`

- Install Jenkins:

```
wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key add -
```

```
sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d/jenkins.list'
```

```
sudo apt update && sudo apt install jenkins
```

```
sudo systemctl start jenkins && sudo systemctl enable jenkins
```

2. Setup Access

- Access via: `http://<your-ip>:8080`

- Use: `sudo cat /var/lib/jenkins/secrets/initialAdminPassword`

- Install suggested plugins and create admin user.

3. First Pipeline (Frontend Deploy)

- Create a pipeline with SCM: GitHub repo link

- Pipeline script example:

```
git branch: 'main', url: 'https://github.com/user/repo.git'
```

```
sh 'sudo cp -r frontend/* /var/www/optimec/'
```

- Make sure to allow jenkins user passwordless sudo (edit `/etc/sudoers`):

```
jenkins ALL=(ALL) NOPASSWD: ALL
```