

## SSH Service Mangement

jenkins ALL=(ALL) NOPASSWD: ALL

sudo systemctl restart ssh.service

sudo systemctl restart sshd.service

sudo apt update

sudo apt install openssh-server

sudo systemctl restart ssh

sudo systemctl status ssh

ls /etc/systemd/system/sshd.service or ls /usr/lib/systemd/system/sshd.service

sudo systemctl daemon-reload

sudo systemctl status ssh

sudo systemctl restart ssh.service

cat /home/chan/.minikube/ca.crt | base64 -w 0; echo

```
chan@Chan: ~/kube
Created symlink /etc/systemd/system/ssh.service.requires/ssh.socket → /usr/lib/systemd/system/ssh.socket.
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.4) ...
/sbin/ldconfig.real: /usr/lib/wsl/lib/libcudart.so.1 is not a symbolic link

chan@Chan:~$ sudo systemctl restart ssh.service
sudo systemctl restart sshd.service
Failed to restart sshd.service: Unit sshd.service not found.
chan@Chan:~$ sudo apt install openssh-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssh-server is already the newest version (1:9.6p1-3ubuntu13.8).
0 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
chan@Chan:~$ sudo systemctl restart ssh
chan@Chan:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/usr/lib/systemd/system/ssh.service; disabled; preset: enabled)
   Active: active (running) since Fri 2025-03-21 06:03:21 UTC; 9s ago
 TriggeredBy: ● ssh.socket
    Docs: man:sshd(8)
          man:sshd_config(5)
   Process: 3412 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
    Main PID: 3413 (sshd)
       Tasks: 1 (limit: 9172)
      Memory: 1.2M (0)
    CGroup: /system.slice/ssh.service
            └─3413 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Mar 21 06:03:21 Chan systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...
Mar 21 06:03:21 Chan sshd[3413]: Server listening on :: port 22.
Mar 21 06:03:21 Chan systemd[1]: Started ssh.service - OpenBSD Secure Shell server.
chan@Chan:~$ sudo apt install openssh-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssh-server is already the newest version (1:9.6p1-3ubuntu13.8).
0 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
chan@Chan:~$ cd
chan@Chan:~$ cd ~/.kube
chan@Chan:~/.kube$ sudo visudo
```

```
chan@Chan: ~/kube
chan@Chan:~$ sudo visudo
[sudo] password for chan:
visudo: /etc/sudoers busy, try again later
chan@Chan:~$ ps aux | grep visudo
root      2495  0.0  0.0 14316 6964 ?        Ss   05:56   0:00 sudo visudo
root      2496  0.0  0.0 14316 1256 pts/2    Ss   05:57   0:00 sudo visudo
root      2497  0.0  0.0  8664 3988 pts/2    T+   05:57   0:00 visudo
chan      2546  0.0  0.0  4088 2000 pts/3    S+   05:58   0:00 grep --color=auto visudo
chan@Chan:~$ sudo kill -9 <PID>
-bash: syntax error near unexpected token `newline'
chan@Chan:~$ sudo kill -9 chan
kill: failed to parse argument: 'chan'
chan@Chan:~$ sudo kill -9 chan visudo
kill: failed to parse argument: 'chan'
chan@Chan:~$ sudo kill -9 2497
sudo kill -9 2496
sudo kill -9 2495
kill: (2496): No such process
kill: (2495): No such process
chan@Chan:~$ ps aux | grep visudo
chan      2571  0.0  0.0  4088 1860 pts/3    S+   05:59   0:00 grep --color=auto visudo
chan@Chan:~$ sudo kill -9 2571
kill: (2571): No such process
chan@Chan:~$ ps aux | grep visudo
chan      2576  0.0  0.0  4088 1892 pts/3    S+   05:59   0:00 grep --color=auto visudo
chan@Chan:~$ sudo visudo
chan@Chan:~$ sudo apt update
sudo apt install openssh-server
Ign:1 https://pkg.jenkins.io/debian-stable binary/ InRelease
Hit:2 https://pkg.jenkins.io/debian-stable binary/ Release
Hit:4 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:5 http://security.ubuntu.com/ubuntu noble-security InRelease
Get:6 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [922 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble-backports/main Translation-en [2588 B]
Get:10 http://archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [14.6 kB]
Fetched 1191 kB in 6s (185 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

```
chan@Chan: ~/kube
^
config:29:7: syntax error
- name: minikube
^
config:30:7: syntax error
user:
^
config:31:23: syntax error
client-certificate: /home/chan/.minikube/profiles/minikube/client.crt
^
config:32:15: syntax error
client-key: /home/chan/.minikube/profiles/minikube/client.key
^
What now?
Options are:
(e)dit sudoers file again
e(x)it without saving changes to sudoers file
(Q)uit and save changes to sudoers file (DANGER!)

What now? x
chan@Chan:~/kube$ cat config
apiVersion: v1
clusters:
- cluster:
  certificate-authority: /home/chan/.minikube/ca.crt
  extensions:
  - extension:
    last-update: Thu, 20 Mar 2025 10:26:50 UTC
    provider: minikube.sigs.k8s.io
    version: v1.35.0
    name: cluster-info
  server: https://127.0.0.1:32769
  name: minikube
contexts:
- context:
  cluster: minikube
  extensions:
  - extension:
    last-update: Thu, 20 Mar 2025 10:26:50 UTC
    provider: minikube.sigs.k8s.io
    version: v1.35.0
```

33°C Sunny Search TV Spotify Discord Google Chrome Firefox Brave WhatsApp ENG IN 01:24 PM 21-03-2025

## Java Application

```
pipeline {
    agent any

    stages {
        stage('SCM Checkout') {
            steps {
                git branch: 'main', url: 'https://github.com/Chan-kongu/DevOps.git'
            }
        }

        stage('Maven Build') {
            steps {
                sh 'mvn clean'
                sh 'mvn validate'
                sh 'mvn compile'
                sh 'mvn test'
                sh 'mvn package'
            }
        }

        stage('Build Docker Image') {
            steps {
                script {
                    sh 'docker build -t chan2004/simplewebapp .'
                }
            }
        }

        stage('Push to Docker Hub') {
```

```
steps {  
  script {  
    withDockerRegistry(credentialsId: 'docker_cred', url: 'https://index.docker.io/v1/') {  
      sh 'docker push chan2004/simplewebapp'  
    }  
  }  
}
```

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

```
stage('Test Application') {  
  steps {  
    withKubeConfig(  
      caCertificate: "",  
      clusterName: 'minikube',  
      contextName: 'minikube',
```

```

credentialsId: 'chandran',

namespace: '',

restrictKubeConfigAccess: false,

serverUrl: 'https://192.168.39.226:8443'

){

    sh 'minikube service my-service --url | xargs curl'

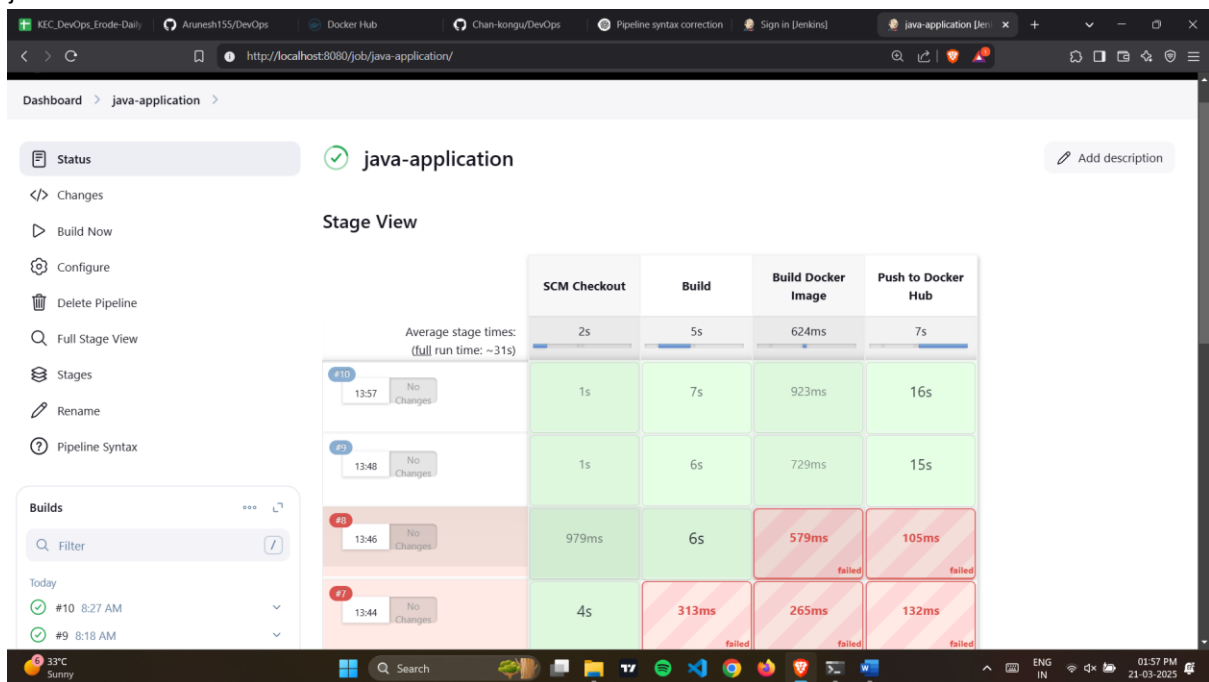
}

}

}

}

```



Dashboard > java-application > #10

Status

Changes

Console Output

Edit Build Information

Delete build '#10'

Timings

Git Build Data

Pipeline Overview

Pipeline Console

Restart from Stage

Replay

Pipeline Steps

Workspaces

✓ #10 (Mar 21, 2025, 8:27:01 AM)

Add description

Keep this build forever

Started by user admin

Started 57 sec ago  
Took 30 sec

This run spent:

- 79 ms waiting;
- 30 sec build duration;
- 30 sec total from scheduled to completion.

Revision: e01e24e3dd6a6f5a50f344d96ad37aa9b7a7ce8d

Repository: <https://github.com/Chan-kongu/DevOps.git>

refs/remotes/origin/main

No changes.

Dashboard > java-application > #10

```
[Pipeline] {
[Pipeline] sh
+ docker push chan2004/simplewebapp
Using default tag: latest
The push refers to repository [docker.io/chan2004/simplewebapp]
2a999cb3ff63: Preparing
25fcd9324c6: Preparing
34f7184834b2: Preparing
5836ece05bfd: Preparing
72e830a4dff5: Preparing
34f7184834b2: Layer already exists
5836ece05bfd: Layer already exists
25fcd9324c6: Layer already exists
72e830a4dff5: Layer already exists
2a999cb3ff63: Pushed
latest: digest: sha256:b4c157645e30789552ed8acf2f38d93af8994a3a290931f86ba3927d332c11d5 size: 1365
[Pipeline] }
[Pipeline] // withDockerRegistry
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

```
chan@Chan: ~/kube
chan@Chan:~$ cd ~/kube
chan@Chan:~/kube$ sudo vi config
chan@Chan:~/kube$ chan:
chan@Chan:~/kube$ kubectl get node
NAME          STATUS    ROLES    AGE   VERSION
minikube      Ready    control-plane  28h   v1.32.0
chan@Chan:~/kube$ minikube service my-service

```

NAMESPACE	NAME	TARGET PORT	URL
default	my-service	8000	http://192.168.49.2:30009

```

* Starting tunnel for service my-service.
docker@127.0.0.1's password: |-----|-----|-----|
| NAMESPACE | NAME      | TARGET PORT | URL              |
|-----|-----|-----|-----|
| default   | my-service | 8000        | http://127.0.0.1:34293 |
|-----|-----|-----|-----|
🔗 Opening service default/my-service in default browser...
🔗 http://127.0.0.1:34293
! Because you are using a Docker driver on linux, the terminal needs to be open to run it.

🛑 Stopping tunnel for service my-service.
chan@Chan:~/kube$ curl http://192.168.49.2:30009
curl: (7) Failed to connect to 192.168.49.2 port 30009 after 0 ms: Couldn't connect to server
chan@Chan:~/kube$ minikube service my-service

```

NAMESPACE	NAME	TARGET PORT	URL
default	my-service	8000	http://192.168.49.2:30009

```

* Starting tunnel for service my-service.
docker@127.0.0.1's password: |-----|-----|-----|
| NAMESPACE | NAME      | TARGET PORT | URL              |
|-----|-----|-----|-----|
| default   | my-service | 8000        | http://127.0.0.1:40977 |
|-----|-----|-----|-----|
🔗 Opening service default/my-service in default browser...
🔗 http://127.0.0.1:40977
! Because you are using a Docker driver on linux, the terminal needs to be open to run it.

```

34°C  
Mostly sunny

ENG  
IN 03:20 PM  
21-03-2025