

Sachinsandron S | DevOps-Day 05:

Devops class guvi (DAY-5)

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Granting Jenkins Sudo Privileges – The jenkins ALL=(ALL) NOPASSWD: ALL entry in the sudoers file allows the Jenkins user to run any command without a password prompt.

Restarting SSH Services – Commands like `sudo systemctl restart ssh.service` and `sudo systemctl restart sshd.service` restart the SSH service, ensuring remote login functionality.

Installing OpenSSH Server – The commands `sudo apt update` and `sudo apt install openssh-server` update package lists and install the OpenSSH server for secure remote access.

Checking SSH Service Status – `sudo systemctl status ssh` checks if the SSH service is running and displays its current status.

Systemd Service File Lookup – `ls /etc/systemd/system/sshd.service` or `ls /usr/lib/systemd/system/sshd.service` helps locate the SSH daemon's systemd service file.

Reloading Systemd Daemon – `sudo systemctl daemon-reload` ensures that systemd picks up changes in service configurations without requiring a reboot.

Encoding Minikube Certificate – `cat /home/david/.minikube/ca.crt | base64 -w 0; echo` encodes the Minikube CA certificate in base64 format, likely for authentication.

Changing Docker Socket Permissions – `sudo chmod 666 /var/run/docker.sock` grants read and write access to all users for Docker's Unix socket, allowing non-root users to interact with Docker.

Deploying Kubernetes Resources – `sh 'kubectl apply -f deployment.yml -validate=false'` applies a Kubernetes deployment file, ignoring validation errors.

Accessing Minikube Service – `minikube service my-service --url | xargs curl` retrieves the Minikube service URL and sends an HTTP request to test its accessibility.

Commands:

```
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/david/.minikube/ca.crt | base64 -w 0; echo sudo chmod 666
/var/run/docker.sock
[https://192.168.39.226:8443](https://192.168.39.226:8443/) sh
'kubectl apply -f deployment.yml --validate=false' minikube
service my-service --url | xargs curl
```

Pipeline codes:

```
pipeline { agent
```

```
any
```

```
environment {
```

```
    DOCKER_CREDENTIALS = credentials('docker-hub-cred') // Docker Hub Credentials ID
```

```
}
```

```
stages {
  stage('SCM') {
    steps {
      git branch: 'main', url: '<https://github.com/MugeshS-04/guvidevopsday1.git>'
    }
  }
}
```

```
    stage('Build') {
  steps {      sh "mvn
clean"        sh "mvn
install"
    }
  }
```

```
    stage('Build Docker Image') {
      steps {
script {
      sh 'docker build -t mugeshs04/guvidevopsday1 .'
    }
  }
}
```

```
    stage('Push to Docker Hub') {
      steps {
script {
      docker.withRegistry('<https://index.docker.io/v1/>', 'docker-hub-cred') {
sh 'docker push mugeshs04/guvidevopsday1'
```

```
    }  
  }  
}  
}  
}
```

```
pipeline { agent  
any
```

```
stages {  
stage('SCM') {  
steps {  
    git branch: 'main', url: '<https://github.com/PraneshC2005/DevOps_simple-  
webapp.git>'  
    }  
}  
stage('Build-clean') {  
    steps{      sh  
'mvn clean'  
    }  
}  
stage('Build-validate') {  
    steps{  
        sh 'mvn validate'  
    }  
}
```

```

stage('Build-compile') {
    steps{
        sh 'mvn compile'
    }
}

stage('Build-test') {
    steps{
        sh 'mvn test'
    }
}

stage('Build-package') {
    steps{
        sh 'mvn package'
    }
}

stage('build to images') {
    steps {
        script{
            sh "docker build -t praneshc/webapplication ."
        }
    }

    stage('docker push hub') {
        steps {
            script{
                withDockerRegistry(credentialsId: 'cred-2', url: '<https://index.docker.io/v1/>') {
                    sh 'docker push praneshc/webapplication'
                }
            }
        }
    }
}

```

}

}

}}

[illegible]

[illegible]