

TASK 1

Task 1

Create a jenkins pipeline that deploys the following node or any other app on a ec2 instance.

Example link : <https://github.com/deltablue-cloud/nodejs-react-hello-world>

I have used https://github.com/Maddy-ria/Test_code.git Project.

I have created a Shell script to install Jenkins. Script is attached in git repo.

```
#!/bin/bash

sudo apt-get update
sudo apt install openjdk-11-jdk -y

curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.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-stable binary/ | sudo tee
/etc/apt/sources.list.d/jenkins.list > /dev/null



sudo apt update

sudo apt install jenkins -y

sudo systemctl start jenkins
```

To ssh on Application instances I have copied Key pair under jenkins.

Credentials

T	P	Store ↓	Domain	ID	Name
		System	(global)	40cef6f9-2ef5-449a-bfed-abd8eb0d5dce	ubuntu

Update credentials

Scope ?

Global (Jenkins, nodes, items, all child items, etc)

ID ?

40cef6f9-2ef5-449a-bfed-abd8eb0d5dce

Description ?

Username

ubuntu

Private Key

☒ Enter directly

Key



Concealed for Confidentiality

Replace

Then we need to select same host under Manage jenkins

SSH remote hosts

SSH sites

SSH sites that projects will want to connect

Hostname ?

44.203.228.85

Port ?

22


Credentials

ubuntu

Add ▾


I have created an App_Deployment job as freestyle Project

+ New Item

 Add description

 People




All +

 Build History

 Project Relationship

 Check File Fingerprint

-

S	W	Name ↓	Last Success	Last Failure	Last Duration
		APP_Deployment	27 min #23	31 min #21	12 sec 

Build Environment

- ☐ Delete workspace before build starts
- ☐ Use secret text(s) or file(s) ?
- ☐ Add timestamps to the Console Output
- ☒ Execute shell script on remote host using ssh ?

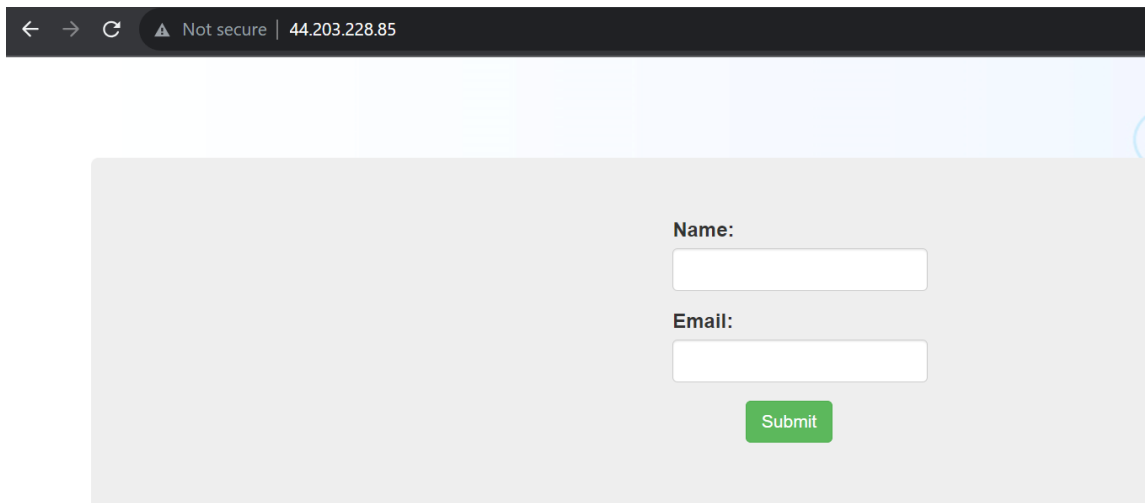
SSH site

ubuntu@44.203.228.85:22

Pre build script ?

```
#!/bin/bash
sudo apt update
sudo apt install apache2 -y
systemctl start apache2
sudo rm -r Test_code
sudo git clone https://github.com/Maddy-ria/Code_Deploy.git
sudo cp -r /home/ubuntu/Code_Deploy/Code_1/* /var/www/html/
```

After Deployment We can see this webpage on public IP.



A screenshot of a web browser window. The address bar shows a 'Not secure' warning and the URL '44.203.228.85'. The page content is a simple form on a light gray background. It contains two text input fields, one labeled 'Name:' and one labeled 'Email:'. Below these fields is a green 'Submit' button.

Following must be allowed to access jenkins and the app page.

Inbound rules

Outbound rules

Tags

Inbound rules (4)

Manage tags

Edit inbound rules

Filter security group rules

<

1

>

<input type="checkbox"/>	Name	Security group rule...	IP version	Type	Protocol
<input type="checkbox"/>	–	sgr-04048489968ca17...	IPv4	Custom TCP	TCP
<input type="checkbox"/>	–	sgr-0b67f45d49631ae06	IPv4	SSH	TCP
<input type="checkbox"/>	–	sgr-01eba9f3bca0a1711	IPv4	HTTP	TCP
<input type="checkbox"/>	–	sgr-03e560445aebb8c...	IPv4	All ICMP - IPv4	ICMP