Experiment No. 3.2

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Subject Name: **CI/CD Pipelines**   **Subject Code:** **22CAP-781**

1. Aim/Overview of the practical:

Create a build node and assign maven based job to that build node.

2. Code for practical:

- Open Jenkins on localhost.
- Click on Manage Jenkins > Credentials > System > Add
- Create a new Credentials using SSH
- Save ssh path to ~/.ssh/jenkins_agent_key
- Create SSH Key using command

ssh-keygen -f ~/.ssh/jenkins_agent_key

```
krish@Arkay MINGW64 ~
$ ssh-keygen -f ~/.ssh/jenkins_agent_key
Generating public/private rsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/krish/.ssh/jenkins_agent_key
Your public key has been saved in /c/Users/krish/.ssh/jenkins_agent_key.pub
The key fingerprint is:
SHA256:Quhy6WEt3JymzNwL/8oOYTQOTnXUiBsCpFsYKCsft8M krish@Arkay
The key's randomart image is:
+---[RSA 3072]----+
| ...o.+..ooo     |
|o  + =..o.. .    |
|..o o =. o       |
|o .=.B o.        |
|..o+O.X S        |
|  .OEB o         |
|    B.+          |
|     = o         |
|      =o.        |
+----[SHA256]-----+

krish@Arkay MINGW64 ~
```

- You can open it using *nano ~/.ssh/Jenkins_agent_key*
- Copy the certificate ad Go to Manage Jenkins > Credentials > System > Add credentials and paste certificate.

T	P	Store ↓	Domain	ID	Name
🔏	👤	System	(global) ∨	jenkins	Jenkins (Jenkins SSH Key)
🔏	👤	System	(global)	Jenkins	Jenkins (Jenkins SSH Key)

Add credentials

Stores scoped to Jenkins

- Run command

docker run -d --rm --name=agent1 --network jenkins -p 22:22 `

>> -e "JENKINS_AGENT_SSH_PUBKEY=[your-public-key]" `

>> jenkins/ssh-agent:jdk17

```
PS C:\Users\krish> docker run -d --rm --name=agent1 --network jenkins -p 22:22 `
>>    -e "JENKINS_AGENT_SSH_PUBKEY=[your-public-key]" `
>>    jenkins/ssh-agent:jdk17
Unable to find image 'jenkins/ssh-agent:jdk17' locally
jdk17: Pulling from jenkins/ssh-agent
609c73876867: Pull complete
1e712917ca50: Pull complete
1b39dbb8d182: Pull complete
56926186b05c: Pull complete
4f4fb700ef54: Pull complete
b26656bb0999: Pull complete
61f05062a490: Pull complete
9c3aee06ddc7: Pull complete
Digest: sha256:c156e30a1a4e98d93ef045f03689375a160297112861907450c510be54f32fbd
```

- Click on Manage Jenkins > Nodes.
- Create a node and select Connect with SSH and select Jenkins SSH.

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- After creating node, Create a job to node and click on Build.

- Build will be completed in few moments.