JENKINS MODULE

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L1: Create Jenkins Master-Slave Configurations and Create a workspace in Jenkins Slave Node using Jenkins Free-style project

STEP 1 : LAUNCH AN EC2 INSTANCE

- *Configuration of instance*
  1. *T3 medium*
  2. *Port no. 8080*
  3. *All traffic*
- *Launch second ec2 instance for node*
- *Same configuration*

STEP 2: INSTALL JENKINS

- *INSTALL JENKINS IN FIRST EC2 INSTANCE*

```
[#!/bin/bash
sudo apt update -y
sudo apt install openjdk-17-jdk -y
sudo apt update -y
sudo apt install maven -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 -y
sudo apt install jenkins -y
service jenkins start
cat /var/lib/jenkins/secrets/initialAdminPassword
#chmod 777 jenkins.sh
#./jenkins.sh]
```

Copy the above command and Jenkins get installed
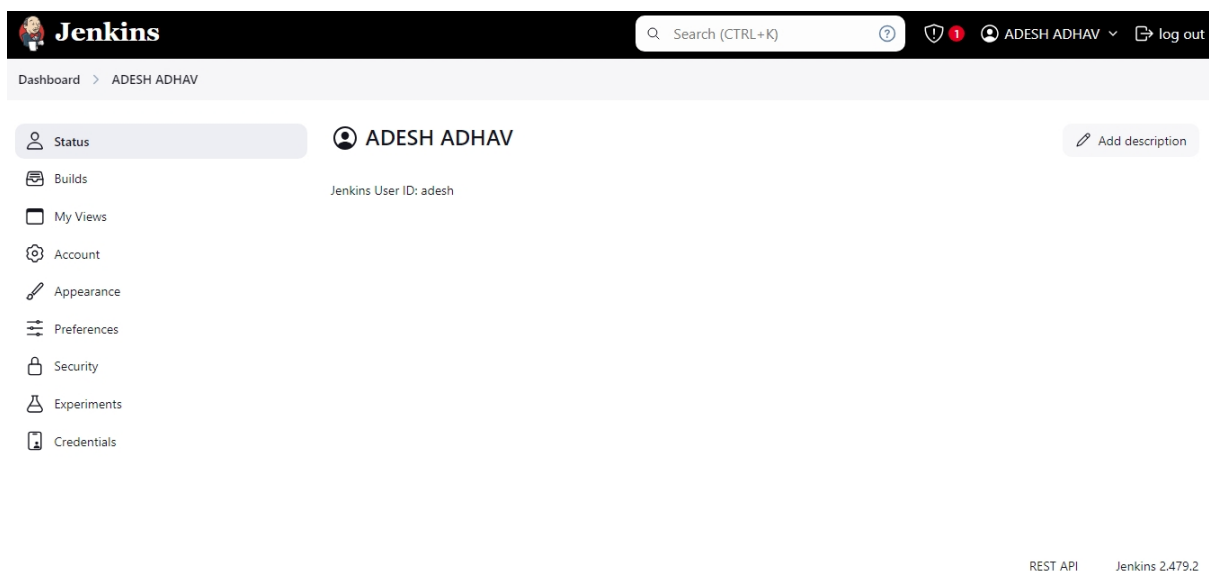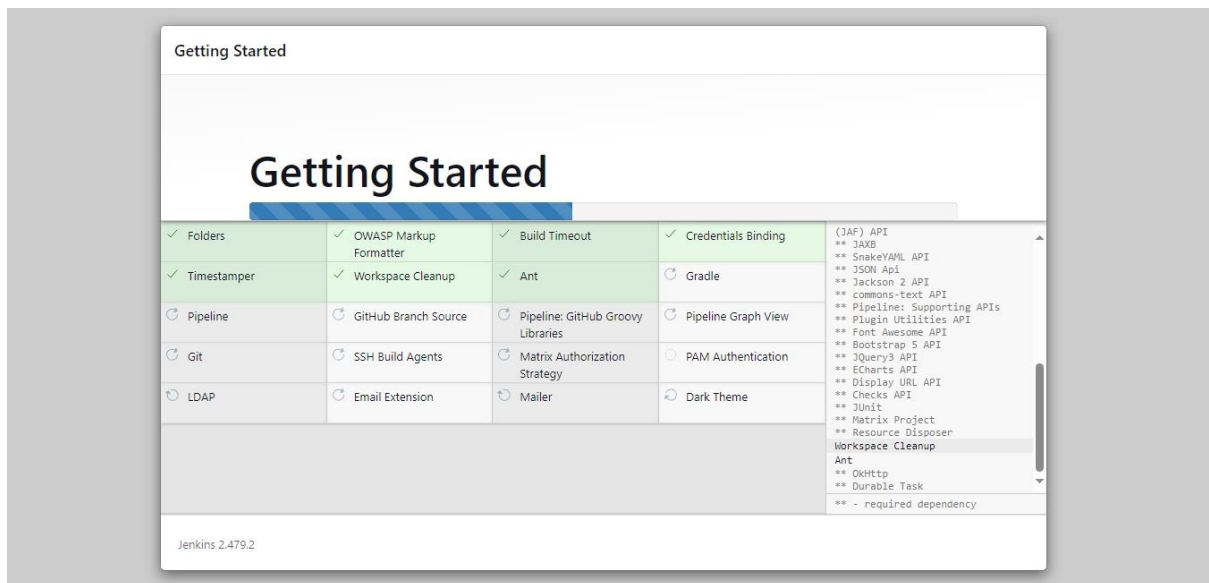
STEP 3: CREATE THE NODE

STEP 4: CONNECT THE NODE TO THE MASTER
- *After node creation copy the url of node to the node machine then u will get connect to the master machine.*
-

STEP 5: MAKE WORKSPACE
- **After making connection, workspace will apper on the node also**

New node

Node name

```
node1
```

Type

🔘 **Permanent Agent**
Adds a plain, permanent agent to Jenkins. This is called "permanent" because Jenkins doesn't provide higher level of integration with these agents, such as dynamic provisioning. Select this type if no other agent types apply — for example such as when you are adding a physical computer, virtual machines managed outside Jenkins, etc.

Create

REST API   Jenkins 2.479.2

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aws ⠿ 🔍 Search   [Alt+S]   🖻 🔔 ❓ ⚙ Ohio ▾   ADESH ADHAV ▾

EC2

```
Management:       https://landscape.canonical.com
Support:          https://ubuntu.com/pro

ystem information as of Sat Dec  7 08:01:45 UTC 2024

System load:  0.0            Temperature:          -273.1 C
Usage of /:   48.3% of 6.71GB   Processes:           109
Memory usage: 26%            Users logged in:       0
Swap usage:   0%             IPv4 address for ens5: 172.31.7.43

 Ubuntu Pro delivers the most comprehensive open source security and
 compliance features.

 https://ubuntu.com/aws/pro

panded Security Maintenance for Applications is not enabled.

 updates can be applied immediately.
 see these additional updates run: apt list --upgradable

able ESM Apps to receive additional future security updates.
e https://ubuntu.com/esm or run: sudo pro status


* System restart required ***
st login: Sat Dec  7 07:52:35 2024 from 3.16.146.4
untu@ip-172-31-7-43:~$
```

i-0c1b6f74f9fe78134 (jenkis)
PublicIPs: 3.145.57.97   PrivateIPs: 172.31.7.43

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EC2

```
ystem information as of Sat Dec  7 08:00:29 UTC 2024

System load:  0.08           Processes:            110
Usage of /:   40.4% of 6.71GB   Users logged in:      1
Memory usage: 32%            IPv4 address for enX0: 172.31.10.42
Swap usage:   0%

xpanded Security Maintenance for Applications is not enabled.

7 updates can be applied immediately.
o see these additional updates run: apt list --upgradable

nable ESM Apps to receive additional future security updates.
ee https://ubuntu.com/esm or run: sudo pro status


** System restart required ***
ast login: Sat Dec  7 03:24:46 2024 from 3.16.146.5
ubuntu@ip-172-31-10-42:~$ sudo su
oot@ip-172-31-10-42:/home/ubuntu# ls
gent.jar
oot@ip-172-31-10-42:/home/ubuntu#
```

i-09945b089055ee742 (node1)
PublicIPs: 3.21.44.188   PrivateIPs: 172.31.10.42

CloudShell   Feedback   © 2024, Amazon Web Services, Inc. or its affiliates.   Privacy   Terms   Cookie preferences

```
o services need to be restarted.

o containers need to be restarted.

o user sessions are running outdated binaries.

o VM guests are running outdated hypervisor (qemu) binaries on this host.
oot@ip-172-31-10-42:/home/ubuntu# curl -sO http://3.145.57.97:8080/jnlpJars/agent.jar
ava -jar agent.jar -url http://3.145.57.97:8080/ -secret ec3b956634bf737c71ce3926ca5964259345e39f8fc5950f8601b994d13290e7 -name node1 -webSocket -
orkDir "/apt/adesh"
ec 07, 2024 3:29:40 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
NFO: Using /apt/adesh/remoting as a remoting work directory
ec 07, 2024 3:29:40 AM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
NFO: Both error and output logs will be printed to /apt/adesh/remoting
ec 07, 2024 3:29:40 AM hudson.remoting.Launcher createEngine
NFO: Setting up agent: node1
ec 07, 2024 3:29:40 AM hudson.remoting.Engine startEngine
NFO: Using Remoting version: 3261.v9c670a_4748a_9
ec 07, 2024 3:29:40 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
NFO: Using /apt/adesh/remoting as a remoting work directory
ec 07, 2024 3:29:41 AM hudson.remoting.Launcher$CuiListener status
NFO: WebSocket connection open
ec 07, 2024 3:29:41 AM hudson.remoting.Launcher$CuiListener status
NFO: Connected
```

i-09945b089055ee742 (node1)   ✕

PublicIPs: 3.21.44.188 PrivateIPs: 172.31.10.42

Jenkins

Search (CTRL+K)   ① 1   ⓐ ADESH ADHAV ▾   ⮕ log out

Nodes

Clouds

Build Queue   ▾

No builds in the queue.

Build Executor Status   ▾

Built-In Node   0/2

node1   0/1

Nodes

                                        + New Node   Configure Monitors   ⟳

S	Name ↓	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time	
🖥	Built-In Node	Linux (amd64)	In sync	3.82 GiB	❗ 0 B	3.82 GiB	0ms	⚙
🖥	node1	Linux (amd64)	In sync	4.22 GiB	❗ 0 B	4.22 GiB	115ms	⚙
	Data obtained	26 sec	26 sec	26 sec	26 sec	26 sec	26 sec	

Icon: S   M   L   Legend

REST API   Jenkins 2.479.2

Jenkins

Search (CTRL+K)

ADESH ADHAV ⌄   log out

Status	✓ #3 (Dec 7, 2024, 3:35:28 AM)
Changes	
Console Output	
Edit Build Information	
Delete build '#3'	
Timings	
Previous Build	

Add description   Keep this build forever

Started by user ADESH ADHAV

Started 16 sec ago
Took 0.64 sec on node1

This run spent:

- 8 ms waiting;
- 0.64 sec build duration;
- 0.64 sec total from scheduled to completion.

No changes.

REST API   Jenkins 2.479.2