To add a Node/Slave to Jenkins master.

Step 1:

Create an VM with same OS and install Java 1.8 as installed on Jenkins master.

Before you can install Jenkins, you need to setup a Java virtual machine on your system. Here, let's install the latest OpenJDK Runtime Environment 1.8.0 using YUM:

```
sudo yum install java-1.8.0-openjdk.x86_64
```

After the installation, you can confirm it by running the following command:

```
java -version
```

This command will tell you about the Java runtime environment that you have installed:

```
openjdk version "1.8.0_91"

OpenJDK Runtime Environment (build 1.8.0_91-b14)

OpenJDK 64-Bit Server VM (build 25.91-b14, mixed mode)
```

In order to help Java-based applications locate the Java virtual machine properly, you need to set two environment variables: "JAVA_HOME" and "JRE_HOME".

```
sudo cp /etc/profile /etc/profile_backup

echo 'export JAVA_HOME=/usr/lib/jvm/jre-1.8.0-openjdk' | sudo tee -a /etc/profile

echo 'export JRE_HOME=/usr/lib/jvm/jre' | sudo tee -a /etc/profile source /etc/profile
```

Finally, you can print them for review:

```
echo $JAVA_HOME

echo $JRE_HOME
```

Step2:

Create an project folder on the Node/Slave for the workspace area.

```
[root@localhost project]# pwd
/root/project
[root@localhost project]#
```

The folder should have the same user permission that would be used to authenticate Slave from Master.

For example, if you are using centos as the username then the folder "project" should have the same right as below.

```
[centos@localhost root]$ cd ~
[centos@localhost ~]$ ls
[centos@localhost ~]$ pwd
/home/centos
[centos@localhost ~]$ mkdir project
[centos@localhost ~]$ ls -l
total 0
drwxrwxr-x. 2 centos centos 6 May  5 00:26 project
[centos@localhost ~]$
```

If it does not then,

$ chown centos:centos project

Step3:

On the Jenkins master, under the Manage Jenkins

Click on "Manage Nodes".

Select as below and click "OK"

Click on "New Node".

Provide the below

Name: < Any name>

Executors: no of jobs to be run parallelly on the slave.

Remote directory : -- on the slave node, the location where the "workspace" would be used temporarily during the JOB execution.

Label: -- Group of Slave machines, eg: -GR1

Launch Method : -- SSH agent

Host name : -- Ip address of the slave machine, eg:- 192.168.1.106.

Credentials: -- Username and pwd to login to the Slave machine by the Master.

In case the slave VM is simple usr and pwd. Then below

Click on " Jenkins".

Option 1: -- Adding username and password for VM's created on laptop.

Jenkins Credentials Provider: Jenkins

Add Credentials

|	
Domain	Global credentials (unrestricted)
Kind	Username with password
Scope	Global (Jenkins, nodes, items, all child items, etc)
Username	root
Password	••••••••
ID	

Enter the username and pwd and click on "Save" Then the below screen, to select the credentials that is just configured

Launch method	Launch agent agents via SSH
Host	192.168.1.106
Credentials	root/****** ▼ 🔑 Add ▼
Host Key Verification Strategy	Known hosts file Verification Strategy

Option 2: - For slave machines created on AWS EC2 instance.

Add Credentials

Domain	Global credentials (unrestricted)
Kind	SSH Username with private key
Scope	Global (Jenkins, nodes, items, all child items, etc)
ID	
Description	
Username	centos
Private Key	● Enter directly

Key
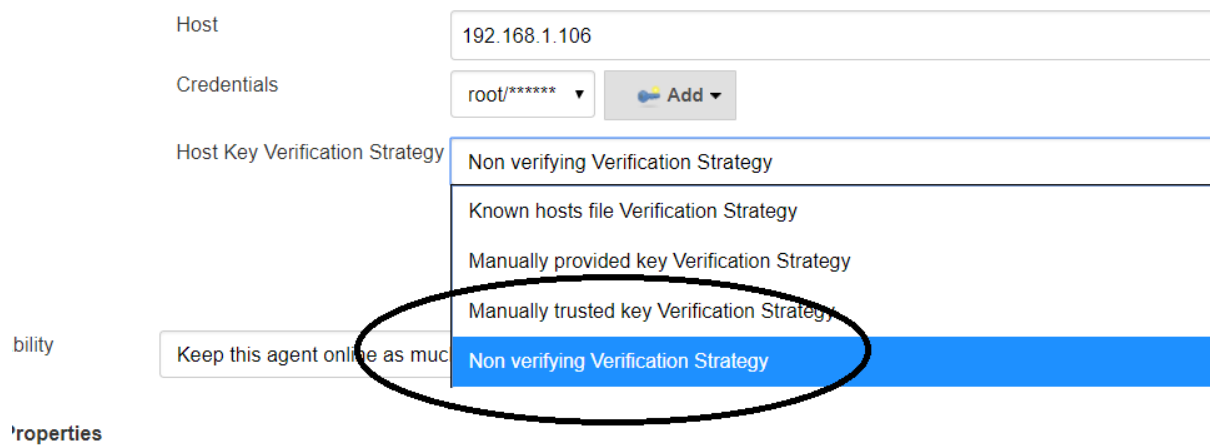
Enter New Secret Below

```
iiWzXEgYUx8WoUUX+yxAUqUUQCCKi7UfXEAnPaiV7SMjy0Cg1bVXIRvg1RF+iEKiiRTWL9(tYi_9t
hxPRbUP6TwUtpTT0M0GovoJpXi7yMiNtDpISVQpDQmpAWHbUECQ4ZSfFJAhytSV5fVxvvNfwDCvU
316D8CmRBO+dGCG90D0dy8ydaEcovHklwvEB4GAr7o2TtnOzdiaeQRd66CFXXefXd1DHKA==
-----END RSA PRIVATE KEY-----
```

Passphrase

The credentials created should be selected as above screen.

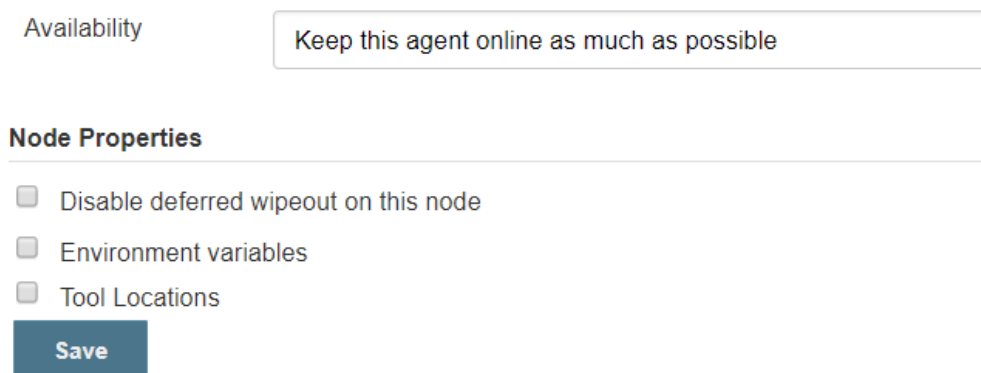Host   192.168.1.106

Credentials   root/****** ▼   🔑 Add ▼

Host Key Verification Strategy   Non verifying Verification Strategy

                                        Known hosts file Verification Strategy

                                        Manually provided key Verification Strategy

                                        Manually trusted key Verification Strategy

bility   Keep this agent online as much   Non verifying Verification Strategy

Properties

Select " non Verifying" as we don't hve the SSL.

Availability   Keep this agent online as much as possible

Node Properties

☐ Disable deferred wipeout on this node

☐ Environment variables

☐ Tool Locations

Save

Click on save.

Once the Agent is successfully installed, the below screen would be visible.

Jenkins ▶ Nodes ▶ Slave1

🔼 Back to List

🔍 **Status**

🚫 Delete Agent

🔧 Configure

📝 Build History

📊 Load Statistics

🖥️ Script Console

📋 Log

🖥️ System Information

🚫 Disconnect

Build Executor Status ―

🖥️ **Agent Slave1**

Labels

GR1

Projects tied to Slave1

None