**Jenkins Master** - **Slave with Dcoker**

**Pre-requisites:**

* Jenkins Master Instance
* Jenkins Slave Instance

**Jenkins Slave Instance:**

Install Docker:

yum install -y docker

service docker start

usermod -a -G docker ec2-user

Install Git:

yum install git

git clone <https://github.com/bibinwilson/jenkins-docker-slave.git>

Build Docker Image:

cd jenkins-docker-slave

docker build -t naresh240/jenkins-slave:latest .

docker login

docker push naresh240/jenkins-slave:latest

**Jenkins Master Instance:**

Install Git:

yum install git -y

Install Java:

yum install java-1.8.0-openjdk –y

Install Jenkins:

sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat-stable/jenkins.repo

sudo rpm --import https://jenkins-ci.org/redhat/jenkins-ci.org.key

sudo yum install jenkins -y

sudo service jenkins start

Install Docker:

yum install -y docker

service docker start

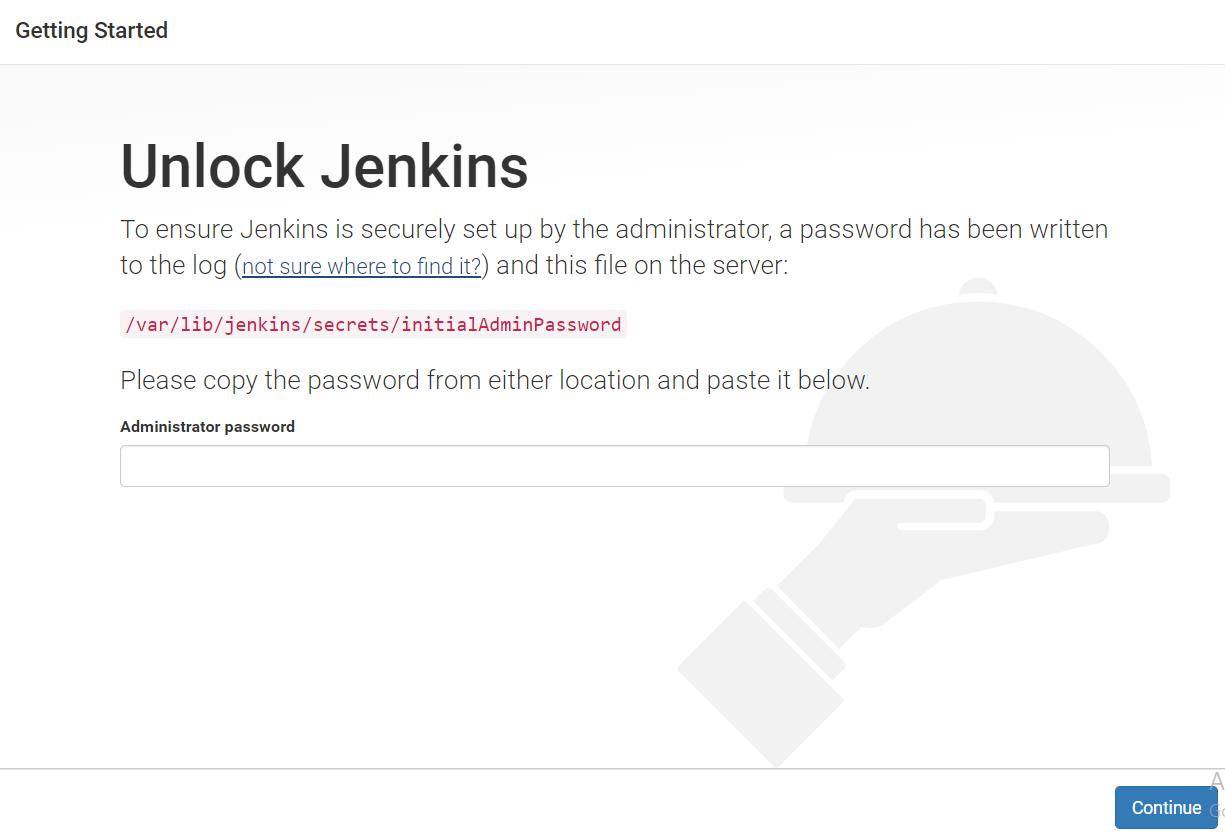
usermod -a -G docker Jenkins

Restart Jenkins:

Sudo service jenkins restart

Open Jenkins in UI:

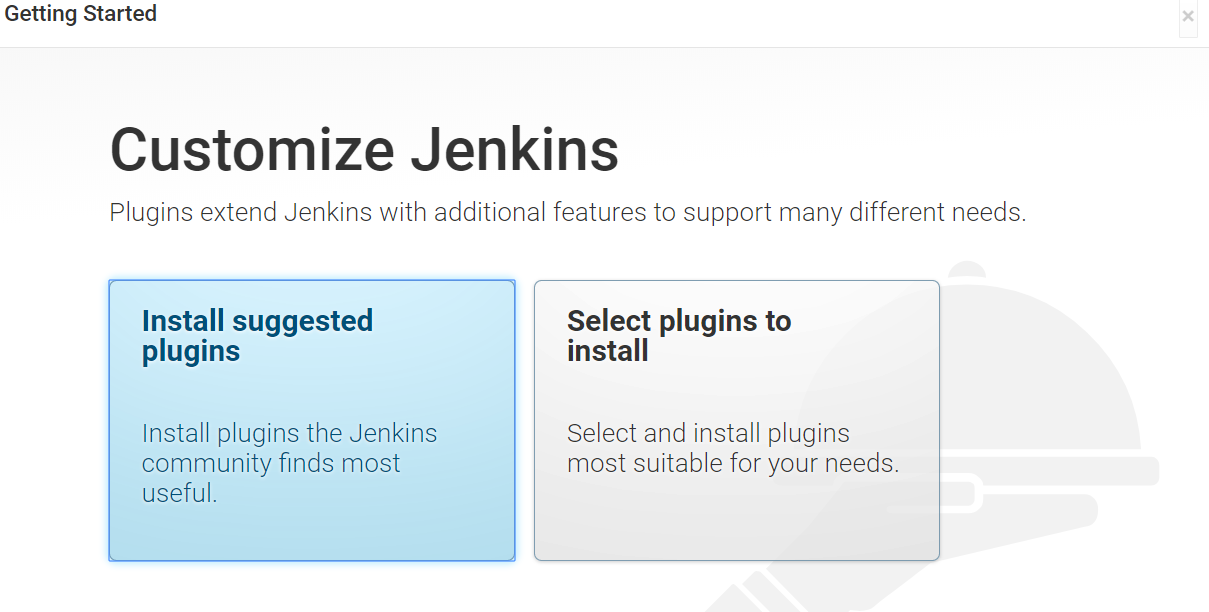
<ip-address>:8080



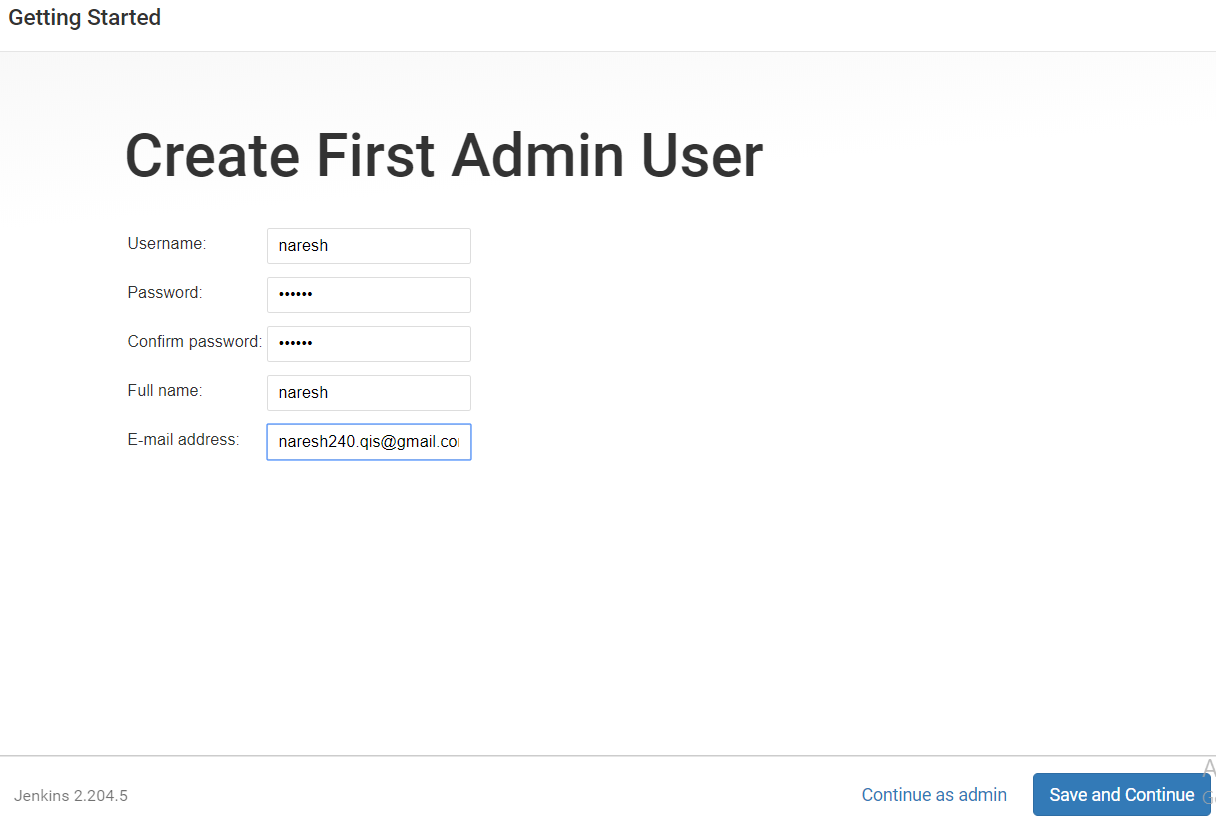
cat /var/lib/jenkins/secrets/initialAdminPassword



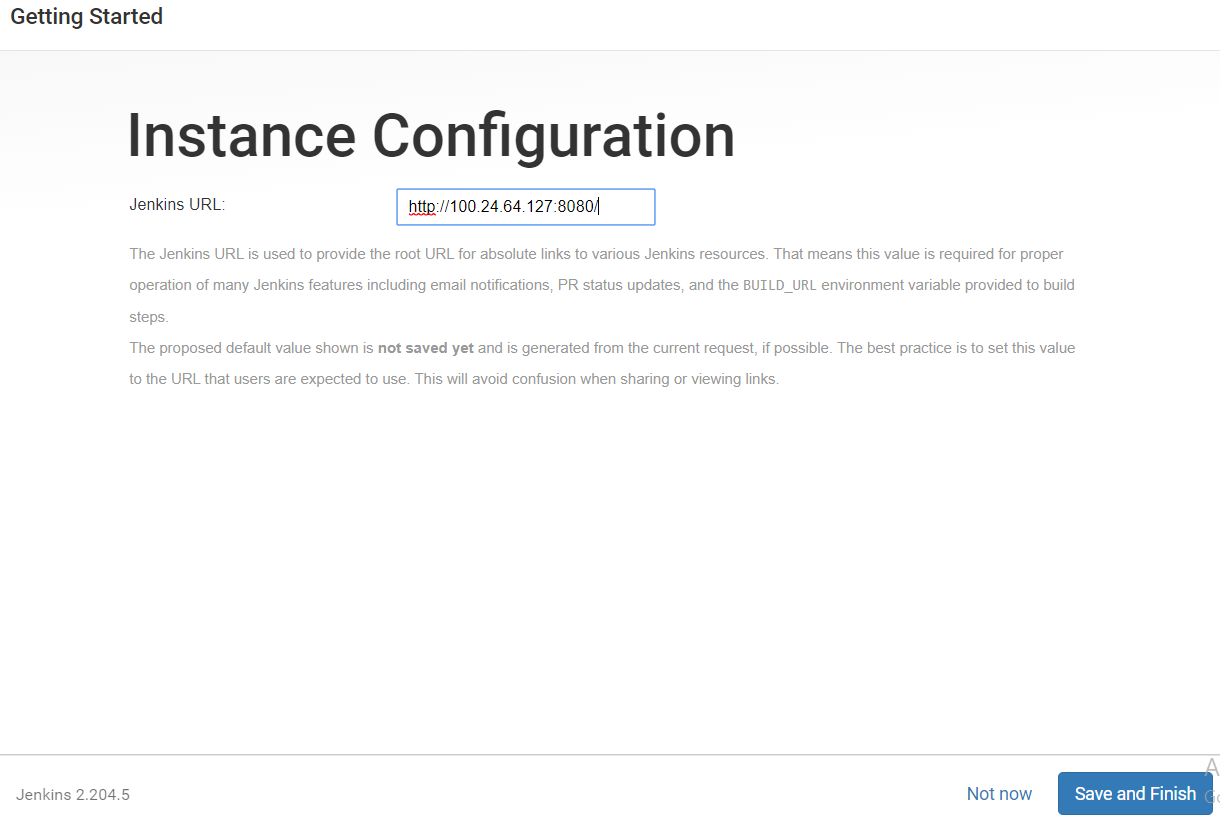
Copy password and paste in UI and then Click on **Continue**



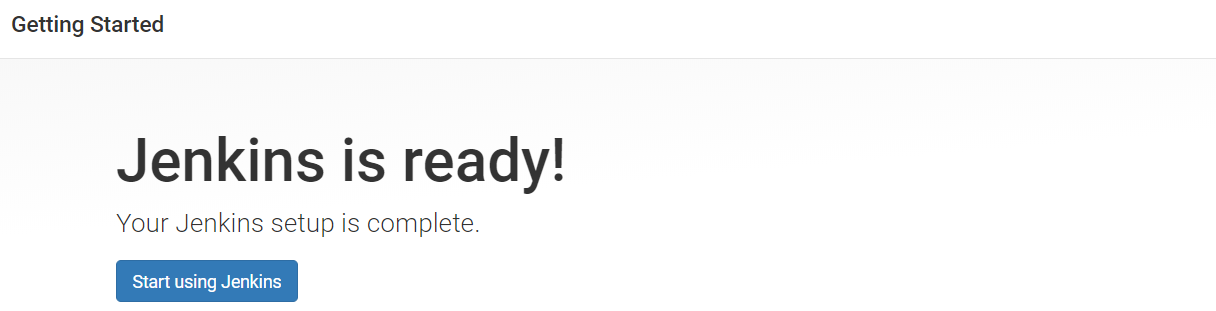
Click on **Install suggested plugins**



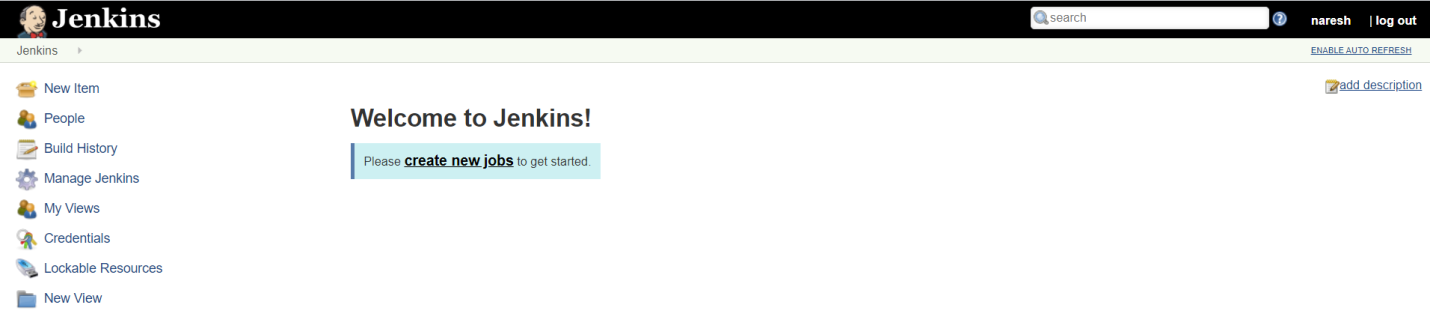
Provide details as above and click on **Save and Continue**



Click on **Save and Finish**

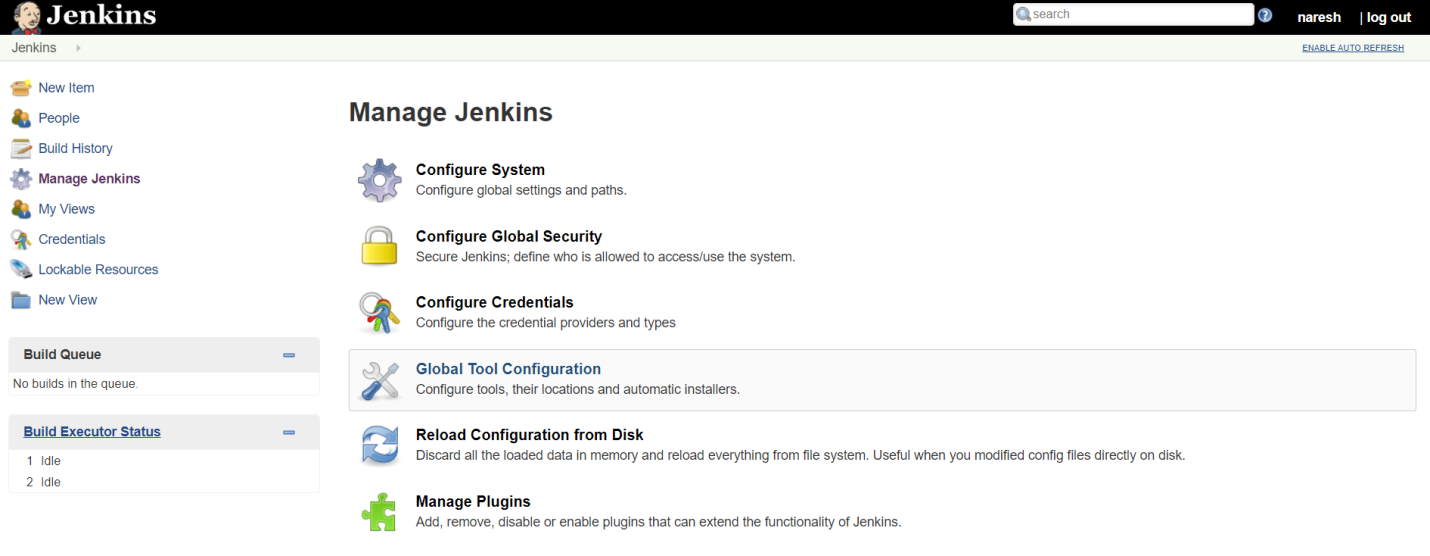


Click on **Start using Jenkins**

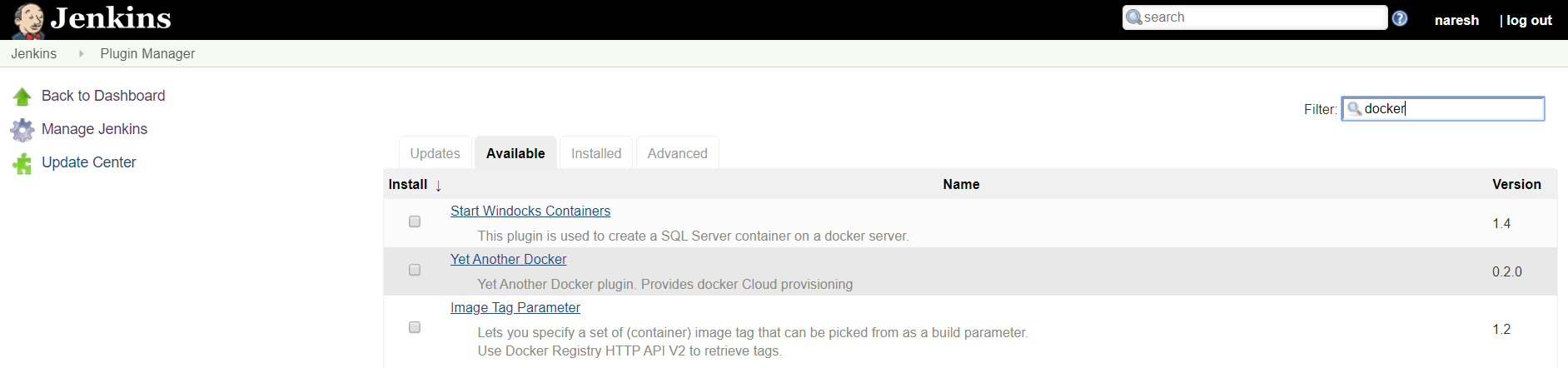


Install **docker plugins** to Jenkins:

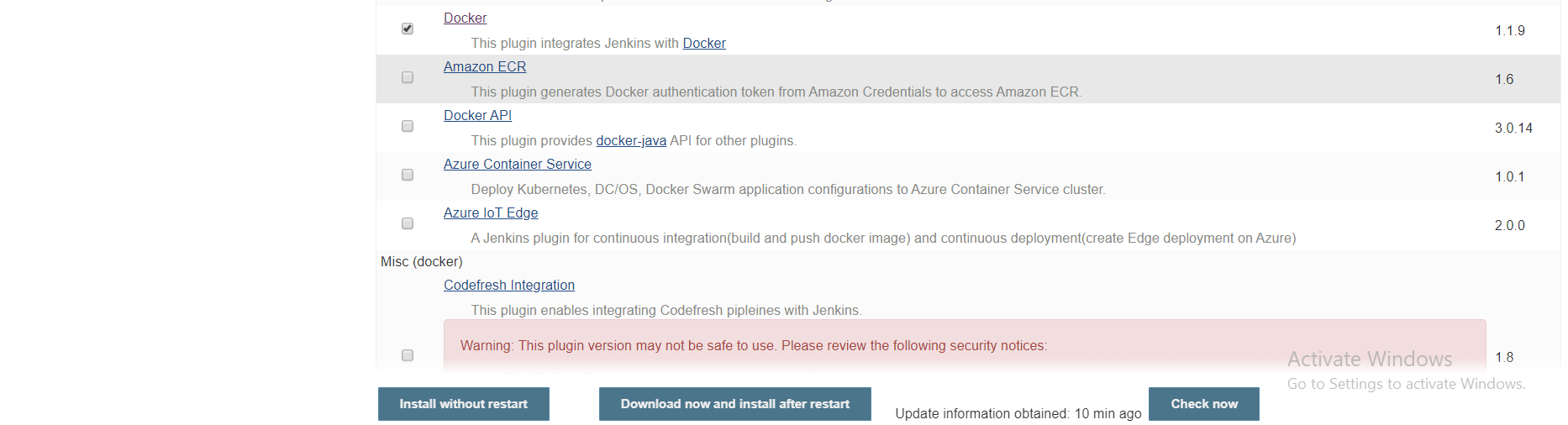
Click on **Manage Jenkins**



Click on **Manage plugins**



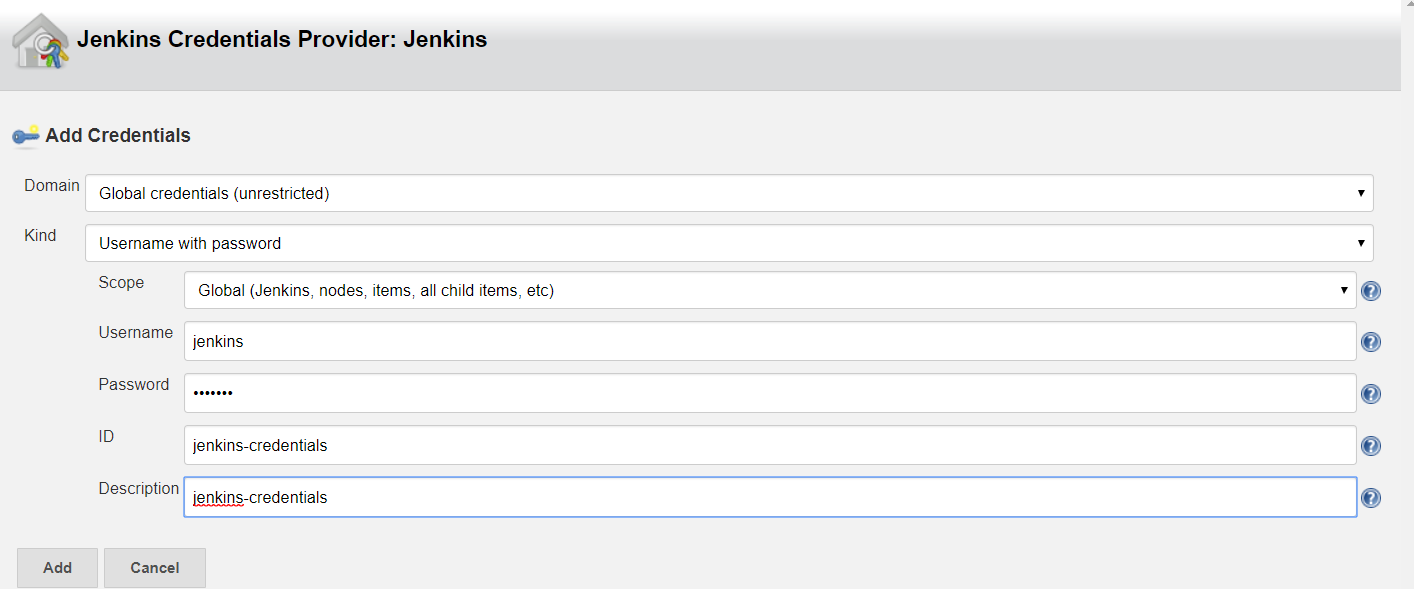
Click Available and search docker plugins



Click on **Install without restart**

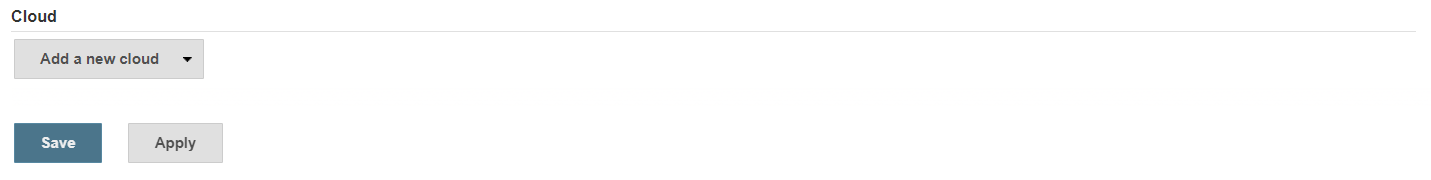
Create credentials to connect Jenkins Slave container

Goto credentials

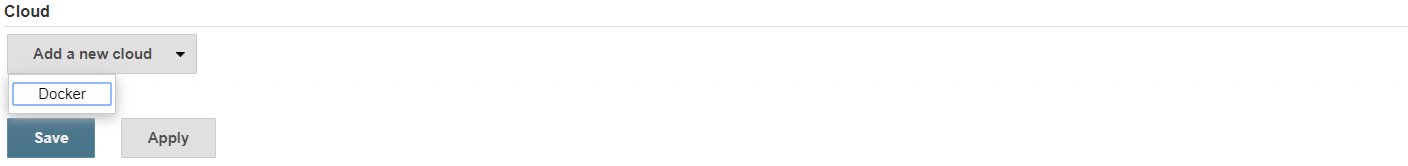


Back to Dashboard and Integrate Jenkins Slave with Master

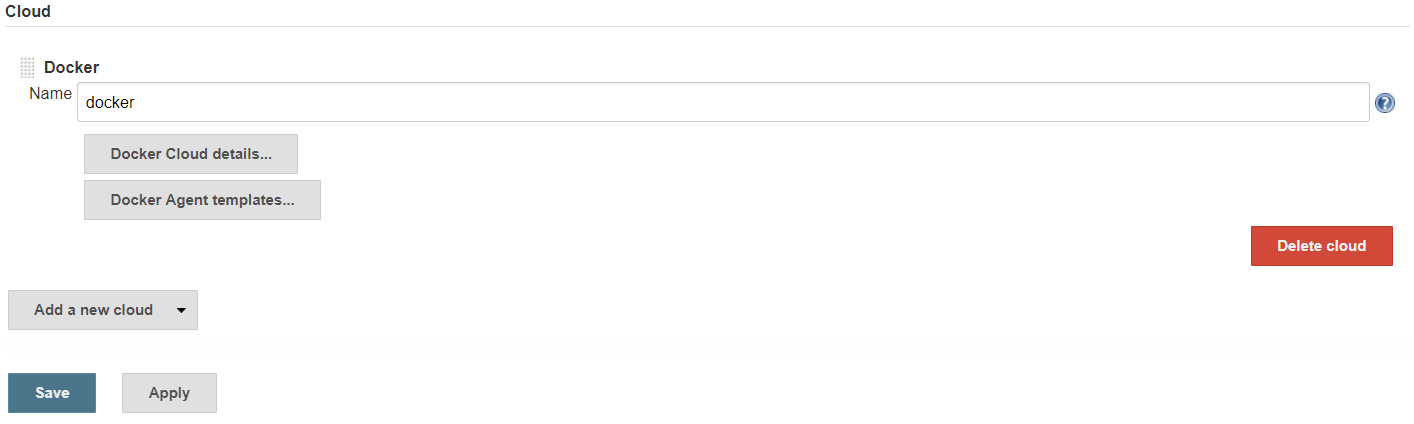
Goto Manage Jenkins 🡪 Configure System



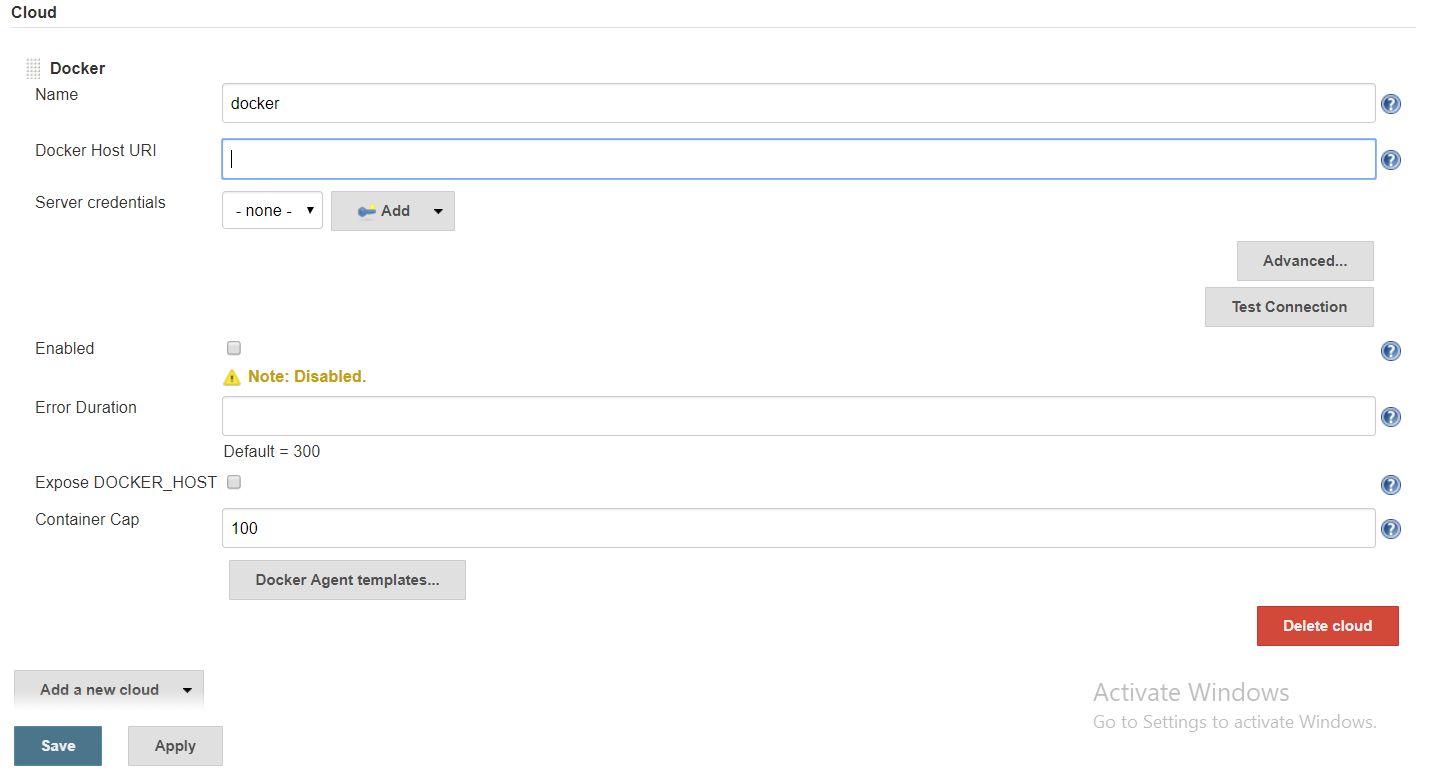
Click on **Add a new cloud**



Click on **Docker**



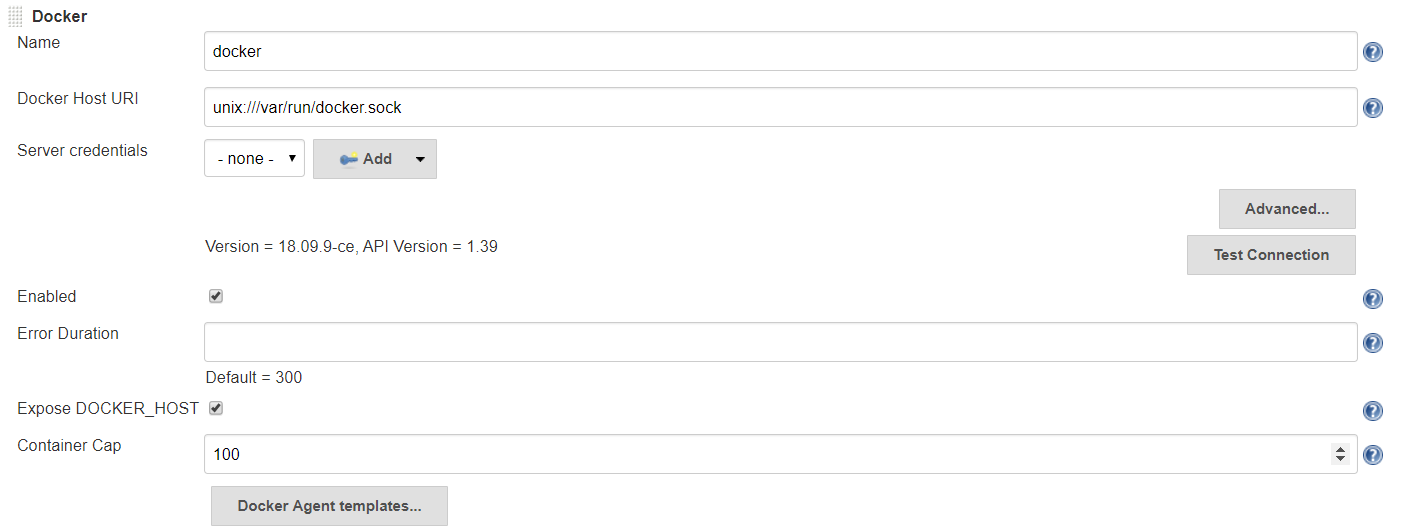
Click on **Docker cloud details**



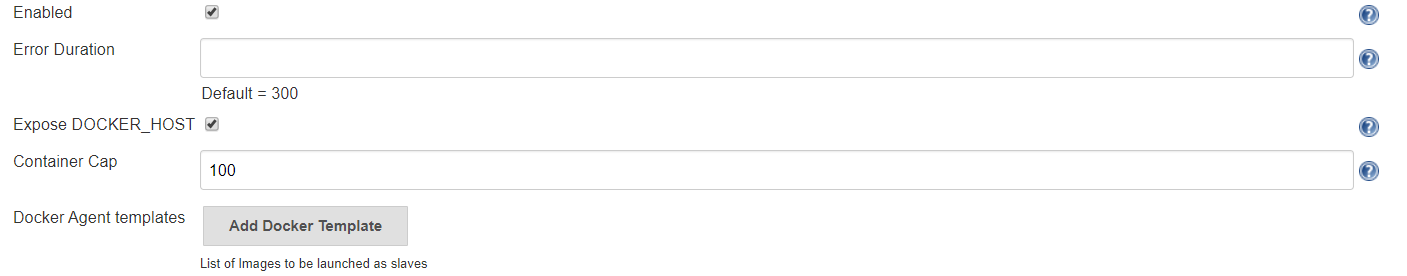
Give details as below

Docker Host URL : unix:///var/run/docker.sock

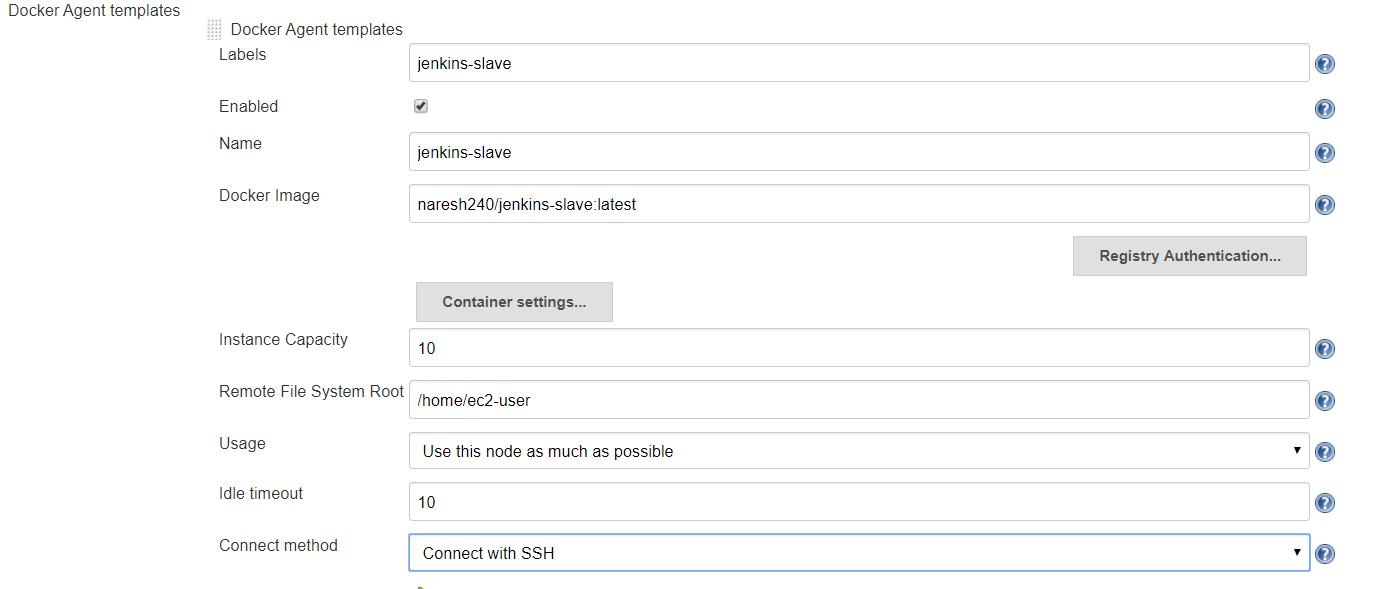
Click on Test Connection

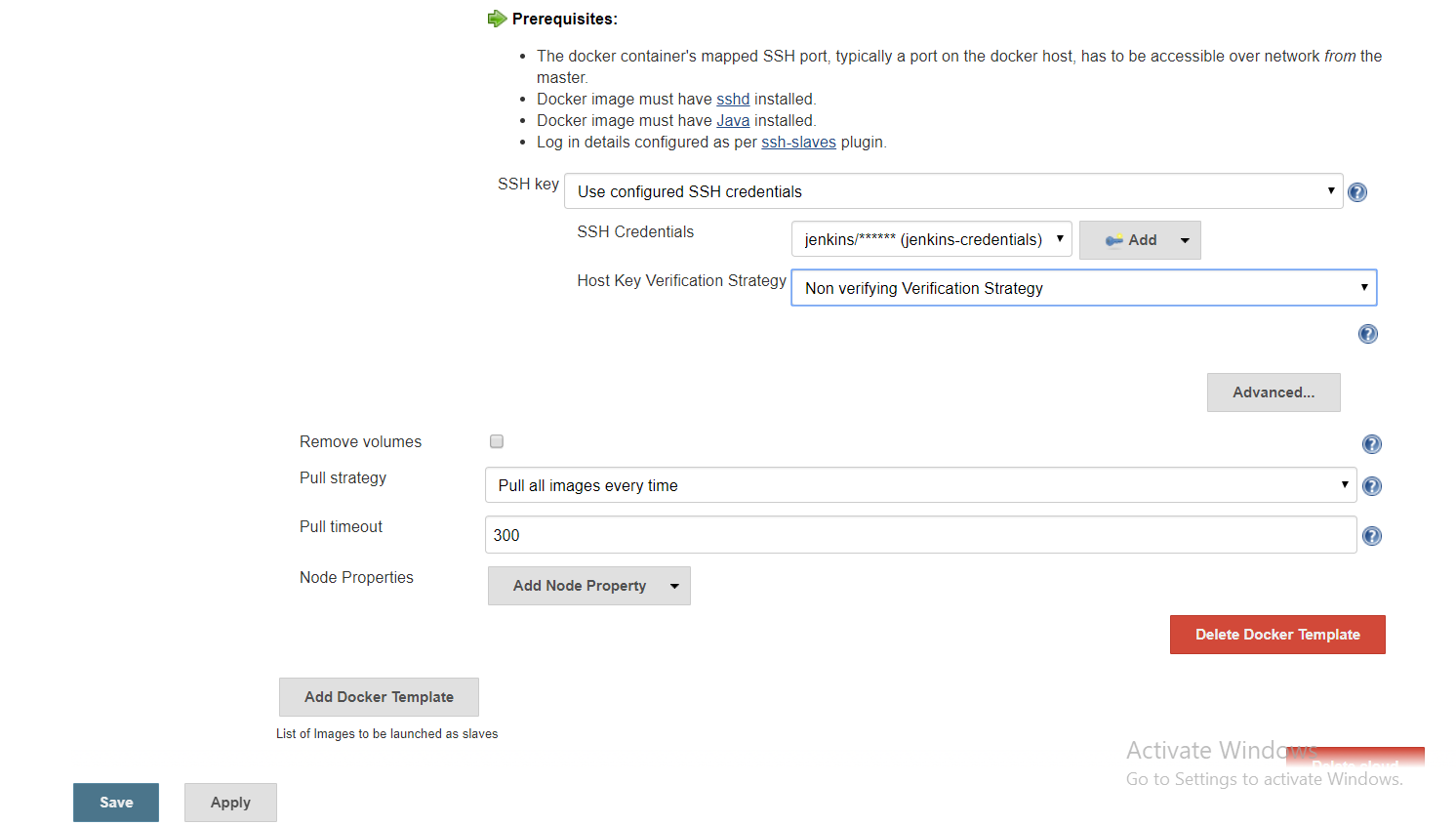


Click on Docker Agent templates



Click on Add Docker Template

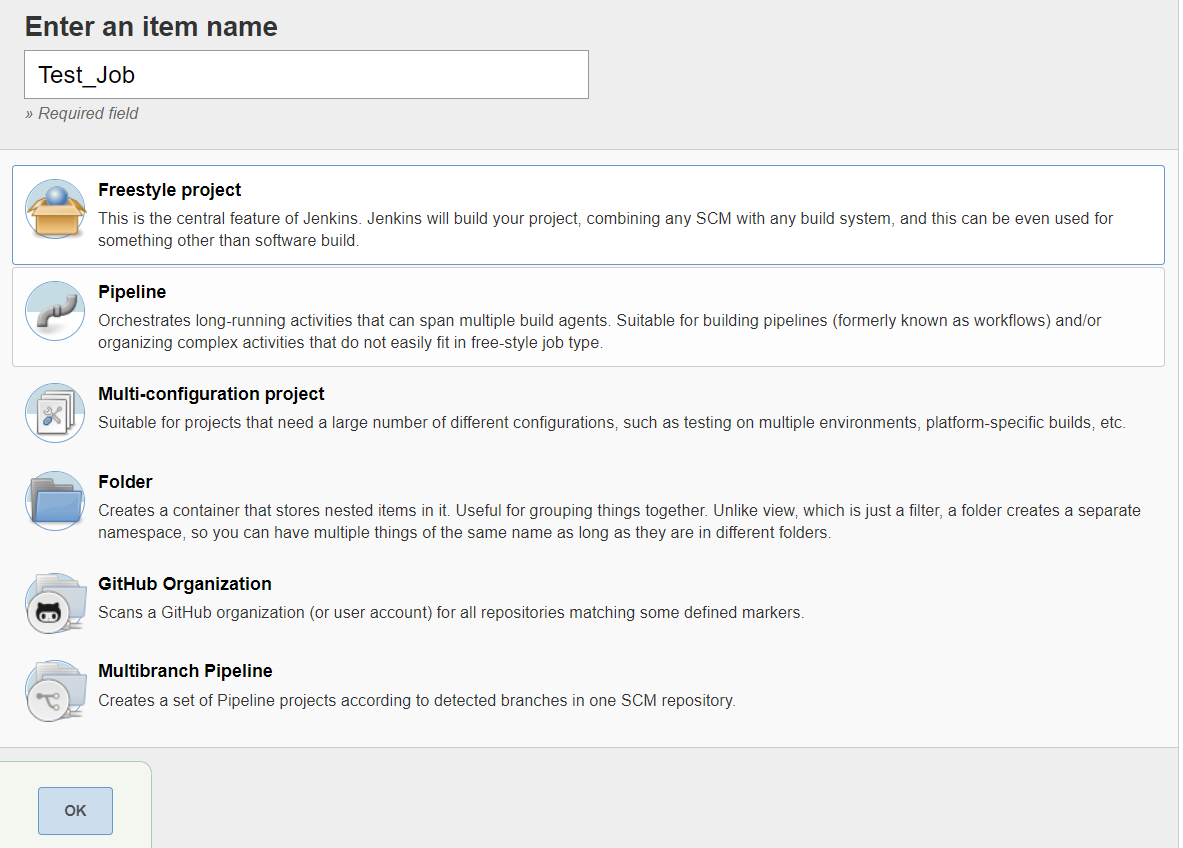




Give details as above and click on **Save**

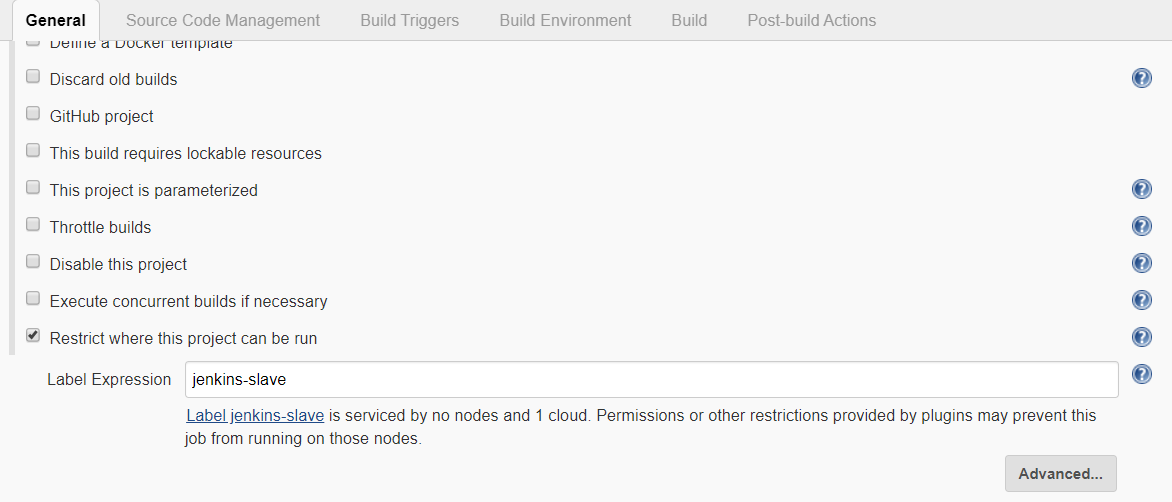
Create a New job:

Click on New Item



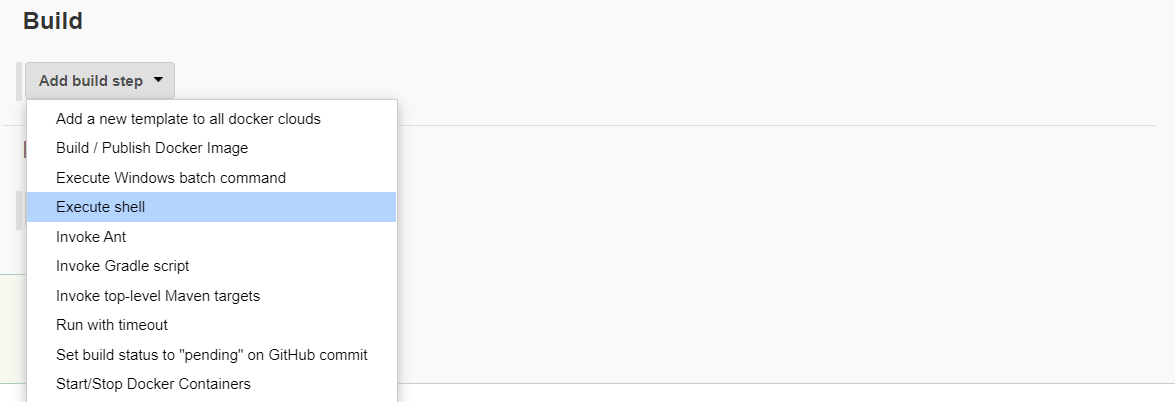
Enter an Item Name

Select Freestyle Project and Click on **Ok**



Give lable name which was we given while integrating slave with Jenkins master

Goto Build Section and select **Execute shell**



Give echo command with in the Execute shell

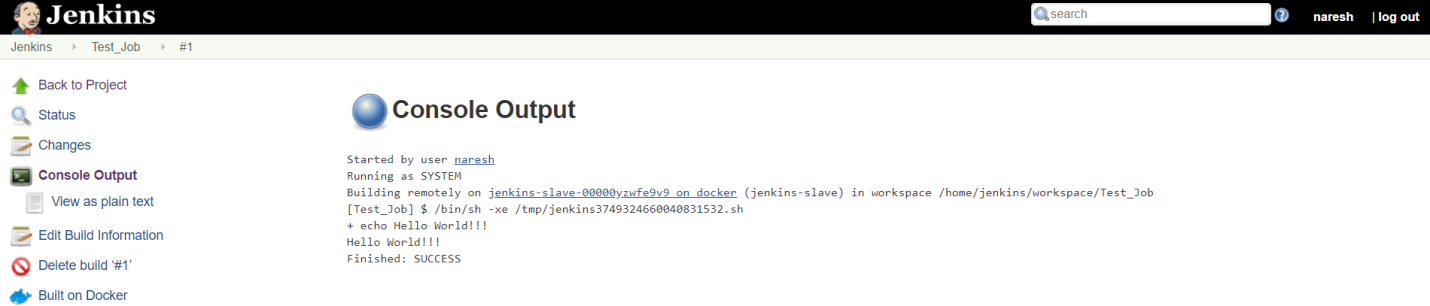


Click on **Save**

Click on **Build**

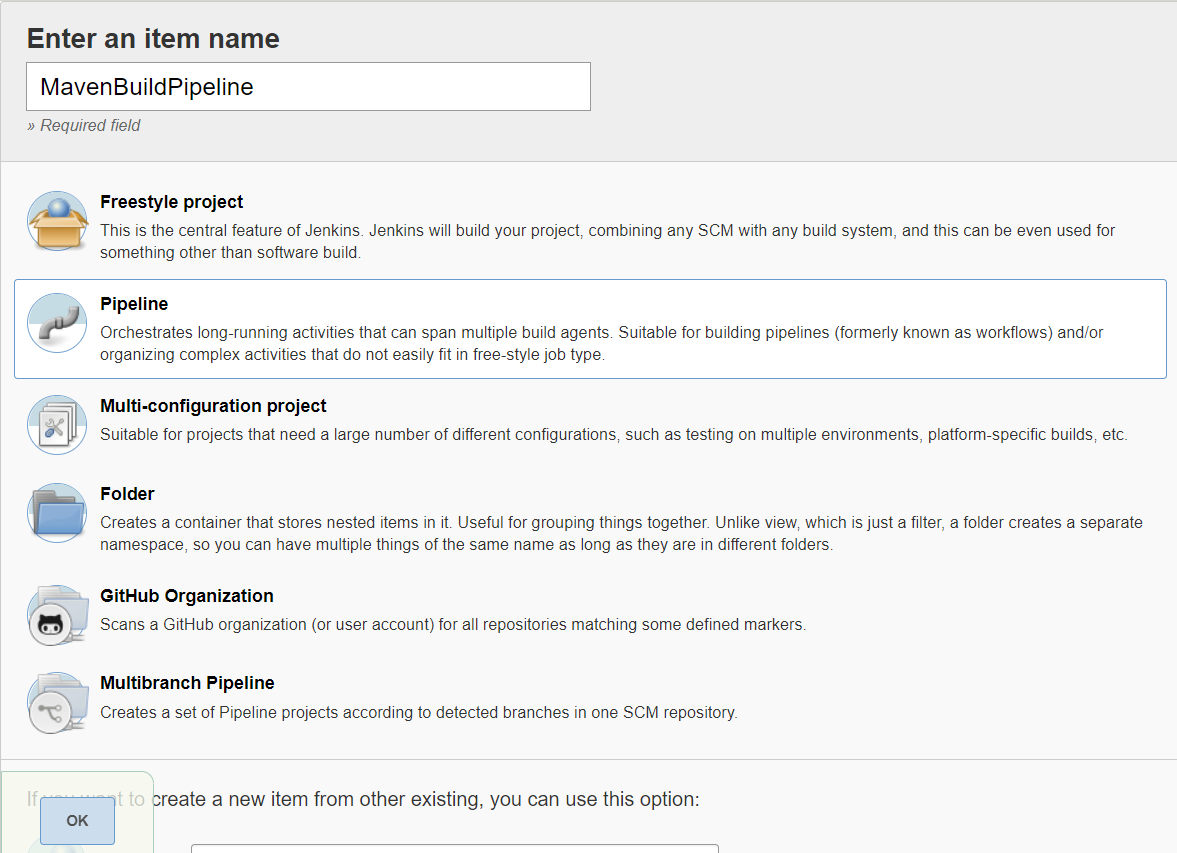


Open Console output



**Deploying Application with Pipeline script:**

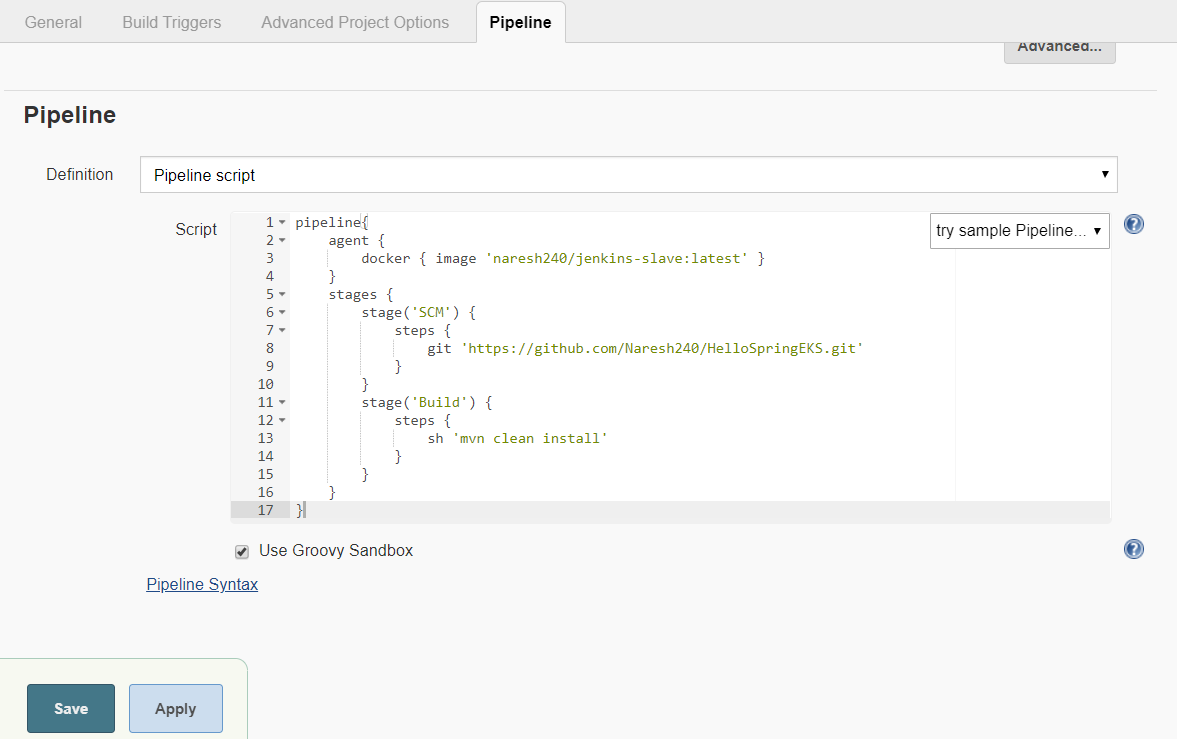
Click on New Item



Enter an item name and select Pipeline

Click on **ok**

Click on **Pipeline** section



Give below code in pipeline

pipeline{

agent {

docker { image 'naresh240/jenkins-slave:latest' }

}

stages {

stage('SCM') {

steps {

git 'https://github.com/Naresh240/HelloSpringEKS.git'

}

}

stage('Build') {

steps {

sh 'mvn clean install'

}

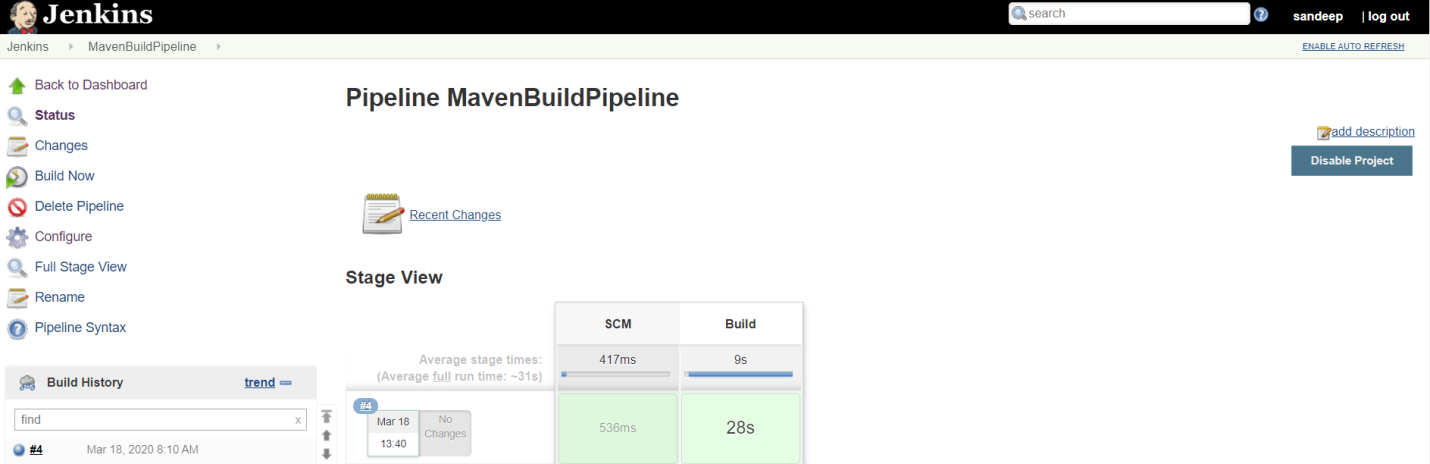
}

}

}

Click on **Save**

Click on **Build**



Build Success

Check Console Output



Likewise we can run our Application either master or slave.

------------------------------------------ **Thanks You** -----------------------------------------------