

GIT Server

- 1) Open CentOS Machine "gitserver" as shared in DATA.
- 2) Add following entries to /etc/hosts [[sudo vi /etc/hosts]]
 <IP Address> gitserver
- 3) For Creating Remote Repository[[Creating GIT Repository with "gituser" as ADMIN]]==>
 - a) sudo groupadd dev
 - b) sudo useradd -G dev -d /home/gituser -m -s /bin/bash gituser
 - c) sudo passwd gituser
 - d) sudo yum install git
 - e) su - gituser

As gituser ==>

 - f) mkdir hello.git
 - g) cd hello.git/
 - h) git --bare init
 - i) cd ..
 - j) mkdir hello-test.git
 - k) cd hello-test.git/
 - l) git --bare init
- 4) Switch to Developer User(wfuser) Directory==>
 - a) git config --global user.name "Sagar Mehta"
 - b) git config --global user.email "sagar.mehta@atgensoft.com"
 - c) git config --global core.editor vim
 - d) git config --list
 - e) ssh-keygen
 - f) ssh-copy-id -i ~/.ssh/id_rsa.pub gituser@gitserver
 - g) Copy hello & hello-test directories to Users' Home
 - h) cd hello
 - i) git init ; git add .
 - j) git commit -m "Initial Commit" -a
 - k) git log
 - l) git remote add origin gituser@gitserver:hello.git

- m) git push origin master
- n) cd ../hello-test
- o) git init ; git add .
- p) git commit -m "Initial Commit" -a
- q) git log
- r) git remote add origin gituser@gitserver:hello-test.git
- s) git push origin master

Jenkins Server

- 1) Open CentOS Machine "jenkinsserver" as shared in DATA.
- 2) Add following entries to /etc/hosts [[sudo vi /etc/hosts]]
 - <IP Address> jenkinsserver
 - <IP Address> gitserver
 - <IP Address> ansibleserver
- 3) sudo yum install git
- 4) sudo wget http://repos.fedorapeople.org/repos/dchen/apache-maven/epel-apache-maven.repo -O /etc/yum.repos.d/epel-apache-maven.repo
- 5) sudo yum install apache-maven
- 6) sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat/jenkins.repo
- 7) sudo rpm --import http://pkg.jenkins-ci.org/redhat/jenkins-ci.org.key
- 8) sudo yum install jenkins
- 9) sudo chkconfig jenkins on
- 10) sudo service jenkins start
- 11) sudo yum install -y docker
- 12) sudo service docker start
- 13) sudo chkconfig docker on
- 14) sudo usermod -aG dockerroot jenkins ; sudo usermod -aG dockerroot wfuser
- 15) sudo groupadd docker
- 16) sudo usermod -aG docker jenkins ; sudo usermod -aG docker wfuser

17) `sudo service docker restart`

18) `sudo passwd jenkins`

19) Change

`jenkins:x:496:493:Jenkins Continuous Integration Server:/var/lib/jenkins:/bin/false`
to

`jenkins:x:496:493:Jenkins Continuous Integration Server:/var/lib/jenkins:/bin/bash`

20) `sudo init 6` [[Reboot Your VM]]

21) Finally, after the installation is complete you can visit the following Address in your browser `http://your-ip-address:8080`

22) Building Web App Jobs ==>

a) Create A Free Style Project(helloBUILD)

b) Add GIT remote url in browser "gituser@gitserver:hello.git"

c) Invoke Top Level Maven targets

Goals ==> `clean package`

POM ==> `pom.xml`

d) `su - jenkins`

e) `cd /var/lib/jenkins/jobs/<JOBNAME>`

f) `git config --global user.name "Sagar Mehta"`

g) `git config --global user.email "sagar.mehta@atgensoft.com"`

h) `git init`

i) `git remote add origin ssh://gituser@gitserver/hello.git`

j) `git remote set-url origin gituser@gitserver:hello.git`

- k) cd
- l) ssh-keygen
- m) ssh-copy-id -i ~/.ssh/id_rsa.pub gituser@gitserver
- n) ssh-copy-id -i ~/.ssh/id_rsa.pub root@ansibleserver
- o) Create A Free Style Project(helloTEST)
- p) Build Triggers ==> Build After helloBUILD
- q) GIT URL ==> gituser@gitserver:hello-test.git
- r) Build Environment ==> Delete workspace before build starts
- s) Build ==>
- t) Execute Shell -->
- u) docker run -itd -v
/var/lib/jenkins/workspace/helloBUILD/target/hello.war:/usr/local/tomcat/webapps/hello.war -p 9090:8080 --name helloWebApp tomcat
- v) Invoke Top Level Maven Targets -->
- w) clean verify
- x) Execute Shell -->
- y) docker kill helloWebApp ; docker rm helloWebApp
- 23) Install Performance Plugin -- Manage Jenkins --> Manage Plugins --> Performance
- 24) Down in Post-build Actions check the Publish Performance test result report checkbox.
- 25) For Source Data files specify **/*.jtl
- 26) Also under Post-build Actions check the Archive the artifacts

checkbox.

27) Under Files to archive specify `**/*jtl-report.html`. This will keep a copy of the html formatted reports for each build so you can look at them in Jenkins.

28) Create A Free Style Project(helloDEPLOY)

a) Build Triggers ==> Build After helloTEST

b) Build Environment ==> Delete workspace before build starts

c) Build ==>

Execute Shell -->

```
scp /var/lib/jenkins/workspace/helloBUILD/target/hello.war  
root@ansibleserver:/etc/ansible/files/
```