**JENKINS**

**INSTALLATION OF LATEST VERSION OF JAVA ON PUTTY**

**Step1:** we need a server. So, I am talking EC2 instance.

* Tag Name = JenkinsServer
* Allowing all traffic for now… (but recommended tight security)
* Launch

Step2: Login in to putty using public ID

* [Ec2-user@x.y.z.a](mailto:Ec2-user@x.y.z.a)
* Auth-key\_link
* Launch the Comand Line Interface

Step3: Check weather java in installed or not in that opened CLI by typing

* Sudo -i
* Java

**Note: Two ways in install JENKINS. 1. By Dockers and 2. WAR files. Here we are following WAR files**

**WAR FILE INSTALLATIONS**

Step 4: Copy link Address <http://mirrors.jenkins.io/war-stable/latest/jenkins.war>

* Download your warfile in terminal:

wget <http://mirrors.jenkins.io/war-stable/latest/jenkins.war>

* ls
* Extract that war file: java -jar Jenkins.war
* Check the version of java: java -version
* I am installing java 1.8
* Download java 1.8 [jdk-8u151-linux-x64.tar.gz](http://download.oracle.com/otn-pub/java/jdk/8u151-b12/e758a0de34e24606bca991d704f6dcbf/jdk-8u151-linux-x64.tar.gz)

Step5: Download WinSCP

* Open WinSCP (Secure CoPy)
* Hostname: IP
* Username: ec2-user
* Click on Advance -> ssh -> Authentication -> browse your .ppk key
* Once connected

Select the download JAVA file. Drag and drop in another window

Step7: Once the transfer in done. In your terminal

* Copy the jdk.gz file from ec2-user to root by **sudo cp /pwd/jdk.gz /root**
* You can see file is copied in root
* Go to root by **sudo -i**
* ls-> u can see your 1.8 version
* Extract .gz file by **tar -xvzf jdk-xxxxxxxx.tar.gz**
* Ls -> u can see .gz is been extracted

Step8: Once you extract, in the terminal

* **Which** **java**
* **cd /usr/bin**
* **ls -al | grep java**
* You can see java is in java -> /etc/alternatives/ java
* **cd /etc/alternatives**
* **ls -al | grep java**
* you can see java -> pointed to java 1.7 version, but we want to java to point java 1.8 version
* **cd /root/jdk1.8xxxxxxx/bin**
* ls : here we can see **java**
* So, Copy the path **cd /root/jdk1.8.1xxx/bin/java**
* Change the softlin.
* Go back to cd /usr/bin
* Ls -al | grep java
* Cd /etc/alternatives (or simple cd -)
* **ln -s /root/jdk1.8xxxx/bin/java java** (Here **/root/jdk1.8xxxx/bin/java** symbolic link)
* **ls -al | grep java**
* You can see now it is pointing to **java1.8.1**
* Check **java -version**

**Step9:** Change the java home directory Something like environmental variable

* **Echo $JAVA\_HOME** -> you get /user/lib/jvm/jre (old version java1.7.xxx path)
* **B**ut wee should get latest java1.8.xx
* **Cd /root/jdk1.8.x/**
* **Pwd ->** /root/jdk1.8.xx
* Copy the path**. That path should be our environmental path / Java home you can say**
* Export JAVA\_HOME=/root/jdk1.8.xx
* **Echo $JAVA\_HOME ->** we get latest path, but it works only once, its not permanent. We need to make global, for all terminals
* So copy the path and open file in etc/bashrc **vim /etc/bashrc**
* Add that path at the end of the file
* :wq!
* If I don’t want to set for all user and I wany to make it only for me then add that path to basrc file which is present in-home directory
* Cd /root
* Ls -al -> I can see .bashrc
* Vim .bashrc
* Add end of the line

Similarly to ec2user

Cd /home/ec2-user/

Ls -al

Vim .bashrc file

* Run **source bashrc** to trigger the changes

**Step10: INSTALL JENKINS**

* Run **java -jar Jenkins.war**
* In new window -> copy and paste IPaddress:8080 -> enter
* You will see Jenkins screen asking for password
* Copy and paste password
* Install recommended plugins
* Create new user and password etc
* **Start using Jenkins**

**Step11:** logout and login to check weather working properly

* If you stop backside running terminal by ctrl+c automatically here Jenkins stops working
* Restart again by **Java -jar Jenkins.war &** -> enter -> its starts running properly
* Now you can close the terminal. & helps in running background

**NOTE: I have duplicated the session and closed the present running session or terminal**

**Logged in as a root and checked weather Jenkins is running or not by the command**

* **Ps -ef | grep Jenkins**
* **root 24322 1 20 10:08 ? 00:00:25 java -jar jenkins.war**

**root 24430 24412 0 10:10 pts/1 00:00:00 grep --color=auto Jenkins**

* **cd /root**
* **ls -al**
* **.jenkins**
* **Cd .jenkins**
* **Ls**

You will see **jobs, nodes, users,plugins,secrets,logs etc**

**Note:** We can see that Jenkins will store all of its files in **/root/.jenkins. If you use yum install Jenkins.war, then it will store in /var/lib/Jenkins**