**How to install Jenkins on EC2 instance.**

**Pre-requsites:**

JAVA installation on Linux instance

Step 1. Type the following linux commands:

[I]. Ensuring that we have right version of Java:

[ec2-user@ip-xxx-xx-xx-xx]$ java -version

//By default Amazon Linux has JAVA version 1.7

//Lets download latest version JAVA 1.8

[II]. Downloading latest version from here

Select link -> Copy link address -> put that link below if new version comes and also change the jdk path if ther version is different that (jdk-8u171)

Install wget, if not already installed

sudo yum install wget

$ wget --header "Cookie: oraclelicense=accept-securebackup-cookie" http://download.oracle.com/otn-pub/java/jdk/8u181-b13/96a7b8442fe848ef90c96a2fad6ed6d1/jdk-8u181-linux-x64.rpm

wget : is a tool/program which we use to download packages from the internet. It retrieves content from web servers and is a part of GNU project.

You can browse and type install java on linux and you would be able to find wget command to download java for the latest version. Download .rpm file

[III]. To install an rpm package use:

$ sudo yum localinstall jdk-8u181-linux-x64.rpm

Amazon Linux instances manage their software using the yum package manager. The yum package manager can install, remove, and update software, as well as manage all of the dependencies for each package. Debian-based Linux distributions, like Ubuntu, use the apt-get command and dpkgpackage manager.

[IV]. Set environment variables:

First need to find where JAVA is. In Linux, we can recursively run the following two commands to locate the JAVA installation spot:

$ file

$(which java)

a). Set JAVA \_HOME variable

$ export JAVA\_HOME=/usr/java/jdk1.8.0\_181/

b). Set JRE\_HOME variable

$ export JRE\_HOME=/usr/java/jdk1.8.0\_181/jre

c). Append the path variable

$ PATH=$PATH:$HOME/bin:$JAVA\_HOME/bin

$ export PATH

[V]. Change the default path

If now you will check java version ($ java -version), you will still get java 1.7

In order to change the default version to java 1.8 :

$ sudo alternatives --config java

Type 2 and hit enter. Now if you would check the java version which your system is pointing to then it will be java 1.8

Congrats !! Your Java 1.8 installation and configuration on Linux server (that was launched on AWS-EC2) has been successfully completed.

**Jenkins installation on AWS ec2 linux instance:**

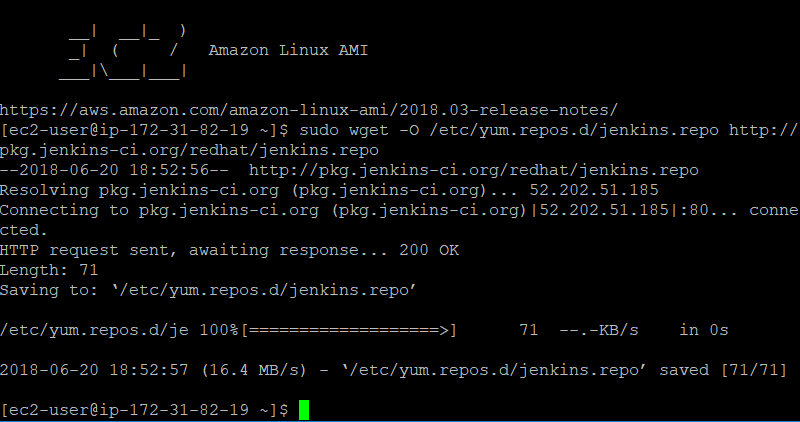
Step 1. Firstly, add Jenkins repository using wget, so that yum get to know where to install Jenkins from.

Install wget ,if not installed

sudo yum install wget

[ec2-user@ip-xxx-xx-xx-xx]$ sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat/jenkins.repo

\*yum is the package manager which can install, remove, update software and can manage all the dependencies for each packages.

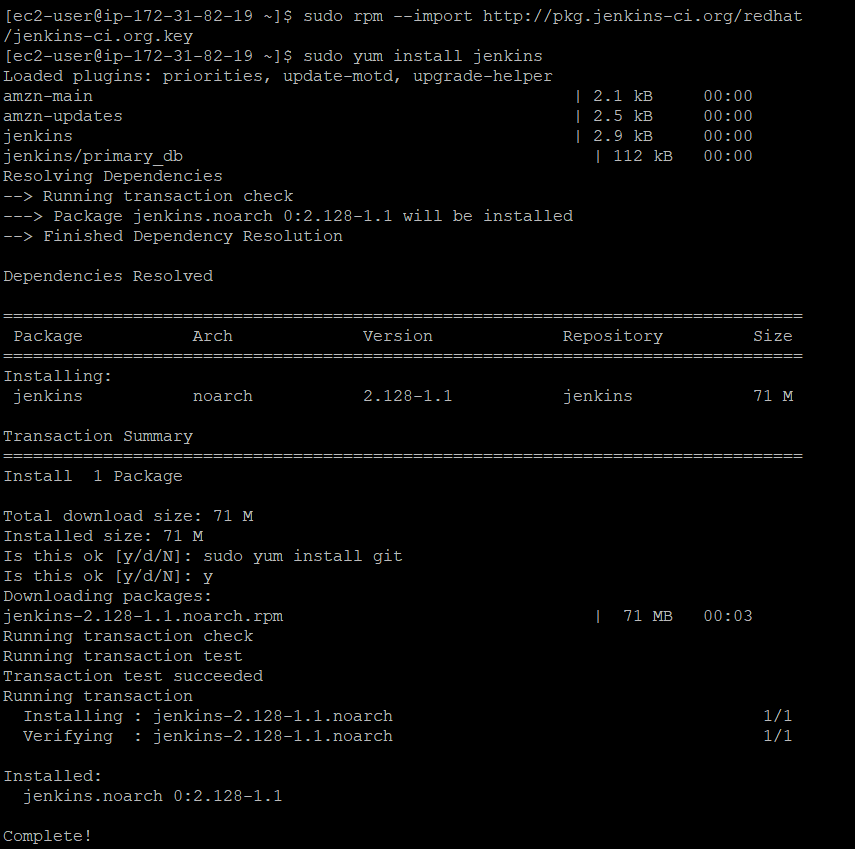


Step 2. Now, let’s add the Jenkins GPG key to our trusted keys, so that we will be able to verify/trust the files that are being sourced (while installing Jenkins )are from trusted site.

[ec2-user@ip-xxx-xx-xx-xx]$ sudo rpm --import http://pkg.jenkins-ci.org/redhat/jenkins-ci.org.key

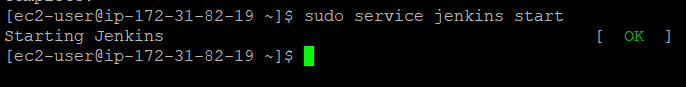
As now, the environment has been prepared and has resolved the required dependencies, lets install Jenkins.

[ec2-user@ip-xxx-xx-xx-xx]$ sudo yum install jenkins



Step 3. Jenkins services needs to be started, with the following command:

[ec2-user@ip-xxx-xx-xx-xx]$ sudo service jenkins start

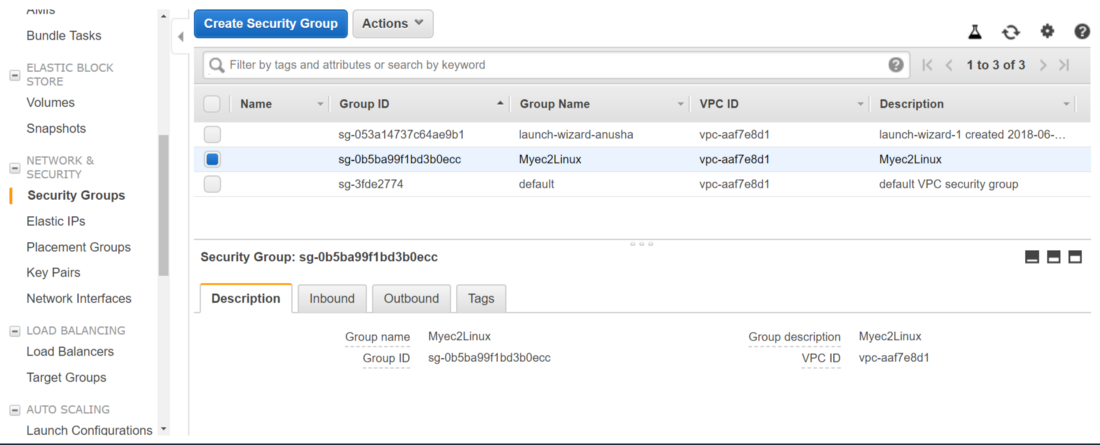


\*If you wish to start Jenkins automatically when your linux instance is started, then you can use chkconfig to add Jenkins to your startup services.

[ec2-user@ip-xxx-xx-xx-xx]$ sudo chkconfig --add jenkins

Step 4. Make sure to open port 8080 (default port to which Jenkins listen):

(i) Go to your AWS management console → ec2 dashboard → Network & Security → Choose the security group of your instance



Click on the Inbound tab

Click on edit → Add rule : Custom TCP with Port range 8080

Step 5. Go to your browser and connect to jenkins via default port 8080

http://<IP\_address>:8080

IP\_address : you can use public DNS of your ec2 linux instance

Step 6. To unlock jenkins fetch the administrator password by typing following command:

[ec2-user@ip-xxx-xx-xx-xx]$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword

Step 7. Click on ‘Install suggested plugins’ in the customize Jenkins window.

Step 8. Create first admin user:

Specify username, password and other details.

Reference☹hidden

https://devops4solutions.com/jenkins-installation-on-aws-ec2-linux-instance/