**Install Jenkins on AWS EC2(method 1)**

Jenkins is a self-contained Java-based program, ready to run out-of-the-box, with packages for Windows, Mac OS X and other Unix-like operating systems. As an extensible automation server, Jenkins can be used as a simple CI server or turned into the continuous delivery hub for any project.

### Prerequisites

1. EC2 Instance
   * With Internet Access
   * Security Group with Port 8080 open for internet
2. Java 11 should be installed

## Install Jenkins

You can install jenkins using the rpm or by setting up the repo. We will set up the repo so that we can update it easily in the future.

1. Get the latest version of jenkins from <https://pkg.jenkins.io/redhat-stable/> and install
2. sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
3. sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
4. amazon-linux-extras install epel
5. amazon-linux-extras install java-openjdk11
6. #on RedHat/CentOs
7. #yum install epel-release # repository that provides 'daemonize'
8. #yum install java-11-openjdk-devel

#yum install jenkins

### Start Jenkins

1. # Start jenkins service
2. service jenkins start
3. # Setup Jenkins to start at boot,

chkconfig jenkins on

### Accessing Jenkins

By default jenkins runs at port 8080, You can access jenkins at

http://YOUR-SERVER-PUBLIC-IP:8080

#### Configure Jenkins

* The default Username is admin
* Grab the default password
* Password Location:/var/lib/jenkins/secrets/initialAdminPassword
* Skip Plugin Installation; We can do it later
* Change admin password
  + Admin > Configure > Password
* Configure java path
  + Manage Jenkins > Global Tool Configuration > JDK
* Create another admin user id

### Test Jenkins Jobs

1. Create “new item”
2. Enter an item name – My-First-Project
   * Chose Freestyle project
3. Under the Build section Execute shell: echo "Welcome to Jenkins Demo"
4. Save your job
5. Build job
6. Check "console output"

METHOD 2:

JENKINS Installation and configuaration :

1)using YUM package

2)using docker image

3)using jenkin.war

4)using tomcat

-pre-requisites:

java must be install

java 1.8.0...yum -y install java-1.8.0.openjdk

-step to install:

1)setup repositories

-install jenkins (yum-y install jenkins)

2)setup docker environment

-download jenkins image

-start container

3)download jenkin.war lts file from official site

start jenkin.war(java.jar jenkin.war)

4)downloand tomcat 7

-download jenkins.war

-copy jenkin.war file into webapp folder of tomcat(/opt/apache-tomcat-7-8.5/webapp/)

-start tomcat(./startup.sh)

3)Download jenkins.war install and configuration:

-go to jenkins page and download copy and paste link wget(paste here)

-Install java and sudo yum -y install java-1.80.0-openjdk

-java-jar jenkins.war

(it will start working jenkins)(data will store in war ....home dir)

-default port-8080 , 192.168.43.183:8080------->paste in broweser

-open jenkins unlock

-passwd will be in home directory take a copy and paste in jenkins.(16 digit) and install

-customizze jenkins

-install and select plugin (u can chose any one) and install

-create first admin user----------->save

-instance configuration

-jenkins url https://,,,,,,,,,,,,,,,,,,,,,-------->save

Jenkins Configuration:

-unlock jenkins use admin pwd

-cat /home/user/.jenkins/secret/adminpwd

-install requied plugin

-setup user and pwd

-login dashboard using username and passed

4)SETUP jenkin on tomcat (download tomcat and install jenkins)

in cmd--------> home]$sudo tar xvfz apache-tomcat-7-0.8 (tomcat) now extract (root user)

home]$ll /opt (tomcat stored)

home]$sudo chown -R user:user /opt/apache-tomcat-7-0.8 (change to normal user)

normal user ~ ]$cp jenkin.war /opt/apache-tomcat-7-0.8/webapp/

webapp~ ]$ls-------->jenkins.war (copied)------------>cd..

apache-tomcat-7-0.8 ]$./bin/startup.sh (run tomcat)

succesfully running tomcat

-to check it ip address:8080

-open tomcat

-go to manage application-give user/passwd

-jenkins opened and above procedure to work

-Once Installation done:

-https://localhost:8080(paste in browser)

-unlocking jenkins---(path->pwd)

-plugin:(suggested plugin and select plugin)aanyone

- create admin user

-i will get jenkin url:https://localhost:8080

-jenkin is ready