**Install Jenkins on AWS EC2**

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 22 & 8080 open for internet
2. Java v1.8.x

***Install Java***

1. By default Amazon Linux has 1.7 version of java

Remove it

yum remove java-1.7.0\*

java -version

yum install java-1.8\*

java -version

openjdk version "1.8.0\_242"

OpenJDK Runtime Environment (build 1.8.0\_242-b08)

OpenJDK 64-Bit Server VM (build 25.242-b08, mixed mode)

1. ***Confirm Java Version and set the java hom***e  
   java -version

find /usr/lib/jvm/java-1.8\* | head -n 3

/usr/lib/jvm/java-1.8.0

/usr/lib/jvm/java-1.8.0-openjdk

/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.242.b08-0.50.amzn1.x86\_64

1. ***JAVA HOME PATH Set:***

To set it permanently update your .bash\_profile  
 vi ~/.bash\_profile

# .bash\_profile

# Get the aliases and functions

if [ -f ~/.bashrc ]; then

. ~/.bashrc

fi

# User specific environment and startup programs

*JAVA\_HOME=/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.242.b08-0.50.amzn1.x86\_64*

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

export PATH

save & exit

1. ***test java home***

echo $JAVA\_HOME

it will return

*/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.242.b08-0.50.amzn1.x86\_64*

***Install Jenkins***

1. Get the latest version of jenkins from <https://pkg.jenkins.io/redhat-stable/> and install  
   yum -y install wget  
   sudo wget -O /etc/yum.repos.d/jenkins.repo <http://pkg.jenkins.io/redhat-stable/jenkins.repo>  
   sudo rpm --import <https://pkg.jenkins.io/redhat-stable/jenkins.io.key>  
   yum -y install jenkins
2. service jenkins status  
   chkconfig jenkins onservice jenkins start
3. 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"