**Jenkins - Class 1**

Jenkins is a CI/CD tool which runs as a java application on any local server. It can be installed in multple ways as stated below.

1. Install as standalone application on any server/OS like linux, windows, etc

2. Install using docker on a docker container

3. Install as a app servlet using any app server like Apache Tomcat or Glasfish

As a best practice for beginer we will follow first method

“Install as standalone application on any server/OS like linux, windows, etc”

The prerequisites for installation of jenkins on any server are

- Min 1GB RAM

- Min 10GB disk space

Installation on AWS RHEL8 server:

As said earlier that Jenkins developed on java we should install java first on our server

To install java - OpenJDK8

$ yum install java-1.8.0-openjdk

Check Java installed or not

$ java -version

Set JAVA\_HOME path

Open .bash\_profile file

$ vi .bash\_profile

Add below line in last column

-export JAVA\_HOME=usr/bin/java (/usr/bin/java is java installed location. Use ‘which java’ command to check where java installed)

-export PATH=$JAVA\_HOME/bin:$PATH

Save and exit from vi editor

Source the bash file

$ source .bash\_profile

$ echo $JAVA\_HOME (this should print your java home path)

**Jenkins Installation steps**

Install ‘wget’ if you don’t have with below command

$ yum install wget

Download repo of jenkins from jenkins official downloads

$ sudo wget -O /etc/yum.repos.d/jenkins.repo <https://pkg.jenkins.io/redhat-stable/jenkins.repo>

Download Jenkins key

$ sudo rpm --import <https://pkg.jenkins.io/redhat-stable/jenkins.io.key>

Install jenkins

$ yum install jenkins

Start the jenkins service

$ systemctl start jenins

Check below 2 folders/files as they need to be installed as part of jenkins installtion

$ cd /var/lib/jenkins

$ cd /etc/sysconfig

Modify jenkins port to custom port number from default 8080 port number

$ cd /etc/sysconfig

$ vi jenkins

-JENKINS\_PORT="8080" to JENKINS\_PORT="8380"

Save and exit vi editor

Restart the jenkins

$ systemctl restart jenkins

Make sure you have ‘All Traffic’ as inbound and outbound rules in security groups of your AWS instance

Copy the public ip and browse as below

<http://privateip:customportnumber>

Ex: <http://3.17.12.93:8380>

Get the password to unlock jenkins from /var/lib/jenkins/secrets/initialAdminPassword directory

Install Jenkins with suggested plugins and create users.