SETTING UP CI : GitHub

1. Launch an AWS EC2 linux instance
2. Check java -version. If less than 8, update it.
3. Download and install git.
4. Download and install jekins step by step
5. To ensure that your software packages are up to date on your instance, use the following command to perform a quick software update:
6. [ec2-user ~]$ sudo yum update –y
7. Add the Jenkins repo using the following command:
8. [ec2-user ~]$ sudo wget -O /etc/yum.repos.d/jenkins.repo <http://pkg.jenkins-ci.org/redhat/jenkins.repo>
9. Import a key file from Jenkins-CI to enable installation from the package:
10. [ec2-user ~]$ sudo rpm — import <https://pkg.jenkins.io/redhat/jenkins.io.key>

Install Jenkins:

1. [ec2-user ~]$ sudo yum install jenkins -y
2. Start Jenkins as a service.

**Note : Before running the Jenkins, make sure your 8080 port is available or else you could run Jenkins on any other available port by simply changing the port inside the configuration file of CentOS rpm based linux i.e. /etc/sysconfig/jenkins file(The location in debian based linux is /var/default/jenkins), change the port as JENKINS\_PORT=”8081”**

1. [ec2-user ~]$ sudo service jenkins start

Now Jenkins is up on port 8080.

1. Create a sample repository on github.
2. Open http://”DNS”:8045
3. Setup Jenkins login credentials
4. Add Github Plugin to Jenkins
5. Click New Item
6. Enter Name, Select Freestyle Project, Click OK
7. Under that ITEM, click CONFIGURE
8. Under GENERAL, Check GITHUB project and copy paste the Repo URL
9. Under SOURCE CODE MANAGEMENT, check Git
10. Copy the Github repo URL from Clone or Download
11. Paste it under Repository URL and setup user credentials.
12. Under Build Triggers, check “GitHub hook trigger for GITScm Polling”
13. Click SAVE.

Configure GITHUB WebHooks

1. In GitHub, under your repository, select SETTINGS
2. Select WEBHOOKS submenu.
3. Add your Jenkins url Payload as <http://DNS:8080/github-webhook>
4. Select Just The Push Event and click Update WebHook.

Now We are ready to test it. Update any file on github, the Jenkins would create a new Build.

SETTING UP BUILD for a simple Nodejs:

1. Add a simple helloworld nodejs script on aws linux instance previously created.
2. Next, add a nodejs plugin to Jenkins. Refer the link below.

<https://wiki.jenkins.io/display/JENKINS/NodeJS+Plugin>

1. Add shell script under EXECUTE SHELL to run the build.
2. Install pm2 daemon. Start / Stop daemon.
3. SAVE

MAKING JENKINS ROOT:

1. Open vim /etc/sysconfig/Jenkins
2. Change “$JENKINS\_USER=root”
3. Change ownerships (use sudo if necessary) :
   1. chown -R root:root /var/lib/jenins
   2. chown -R root:root /var/cache/jenkins
   3. chown -R root:root /var/log/jenkins

NOTES :

* To restart JENKINS, “URL”/restart
* Jenkins could also notify you by email on unsuccessful builds. SETUP IN Configure > Post Build actions.