Installing Jenkins

Objective

This exercise is aimed to get Jenkins up and running on your system. We want to explore the options Jenkins gives us for connecting to other services and what the dashboard means.

Overview

Part 1: Installing Jenkins

Create a new machine (or use the same one we had for maven earlier). You want to use the following options:

- Image: Amazon linux

- Type: t2.micro

- Storage: 8 gig

- Tag: Name = Jenkins

- Security group: Open port 8080/tcp for access from anywhere

Connect to your machine.

To install Jenkins on Centos or Amazon Linux we need to add a new repo before using yum to pull down the install files. Open a terminal window and type:

```
$ cd ~ #make sure we're home!

$ sudo yum install -y git

$ sudo wget -O /etc/yum.repos.d/jenkins.repo \
            http://pkg.jenkins.io/redhat-stable/jenkins.repo

$ sudo rpm --import http://pkg.jenkins.io/\
                              redhat-stable/jenkins.io.key

$ sudo yum install java-1.8.0-openjdk-devel.x86_64 -y

$ sudo yum remove java-1.7.0 -y

$ sudo yum install jenkins -y
```
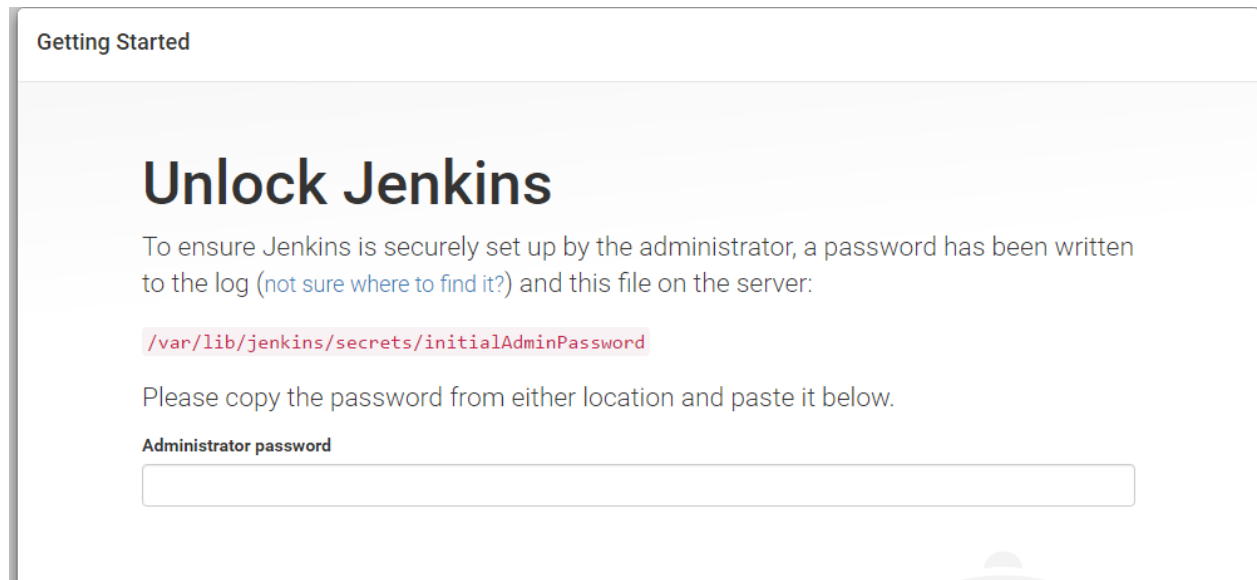
To stop and start the Jenkins service we can then use the following commands:

```
$ sudo service jenkins start    # start|stop|restart available

$ sudo chkconfig jenkins on
```
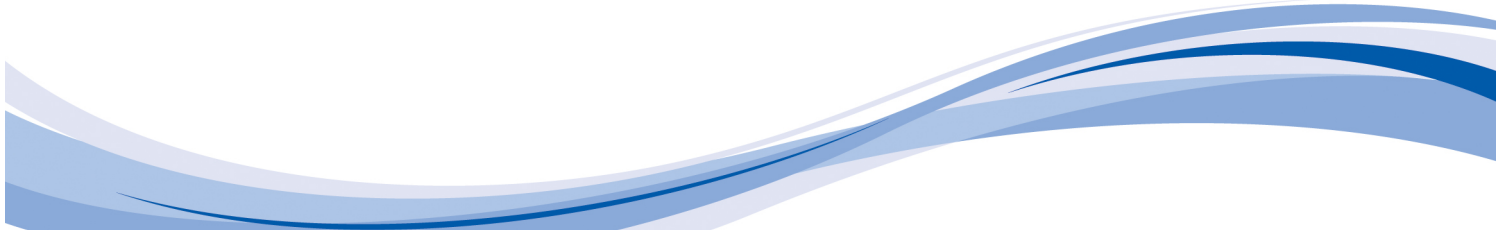
When the service is up and running we should be able to access it via *[yourip]:8080*. (If you want to change the port number it runs on then we need to update the /etc/sysconfig/jenkins file.)

Jenkins (now) requires you to provide the admin password when first accessing the server. Follow the instructions on the screen to retrieve it.

Getting Started

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:

`/var/lib/jenkins/secrets/initialAdminPassword`

Please copy the password from either location and paste it below.

Administrator password

'cat' is a program that outputs the contents of the file to the screen

```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

The next screen you will be prompted as to which set of plugins to install, click on "**Select Plugins to install**"

Scroll through the list, some will have been checked already. We want to add a couple more:

- JUnit Plugin
- Bitbucket Plugin
- Gitlab Plugin

Then click "**Install**"

Create an **admin** user on the next screen. Set all details you are asked.

Note: remember this password!

Getting Started

Create First Admin User

Username:	root
Password:	....
Confirm password:	....
Full name:	root
E-mail address:	root@email.com

Then click "**Save and Finish**"

You should now be presented with the dashboard. If it looks like the installer has crashed, then refresh the page. If this keeps happening, then click "**Continue as admin**" rather than add a new admin user.

Jenkins

Jenkins ▸

- New Item
- People
- Build History
- Manage Jenkins
- My Views
- Credentials

Welcome to Jenkins!

Please **create new jobs** to get started.
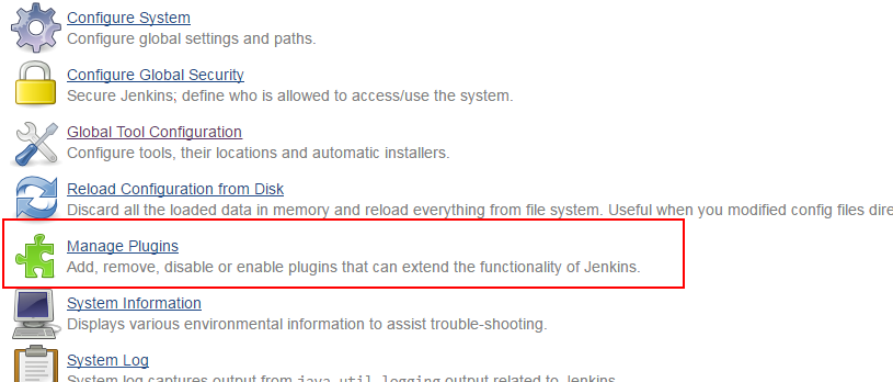
Build Queue —

No builds in the queue.

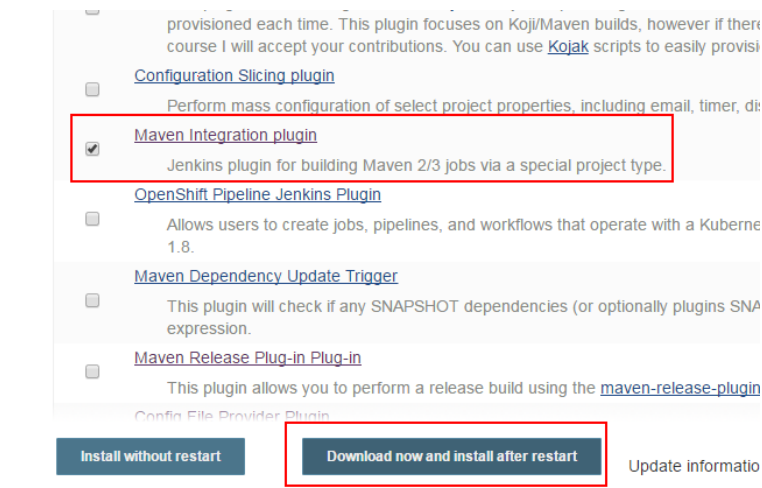**Build Executor Status** —

1 Idle
2 Idle

Part 2: Install the maven plugin

Click on "**Manage Jenkins**" and go to "**Manage Plugins**"

Click on "**Available**" and search for "**Maven Integration Plugin**"

Click "**Download now and install after restart**"

Select the checkbox at the bottom of the screen to **restart Jenkins when no jobs are running**. This will automatically restart Jenkins for you - you will need to login again with your created admin account or "admin" and the password used at the start from `/var/lib/jenkins/secrets/initialAdminPassword`

Part 3: Add the maven tool to the list of available tools

Click on "**Manage Jenkins**" and then go to "**Global Tool Configuration**"
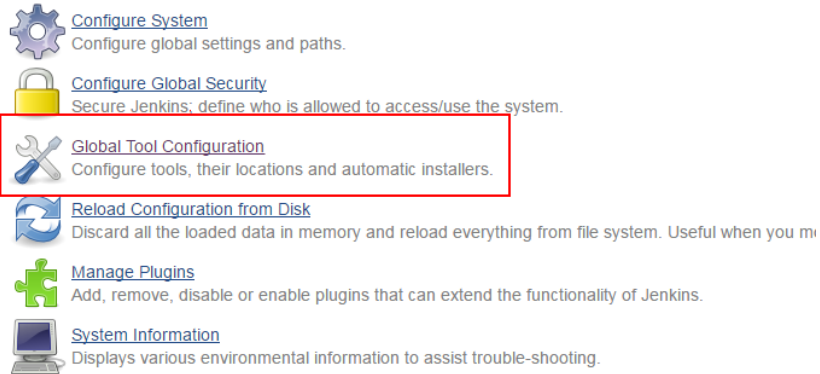
On the next screen scroll down to the **Maven** section and click "**Add Maven**". Give the maven installation a name - **M3** - and click save.

Your system is now configured and ready to build some jobs!

If you have time…

- Create a script to install Jenkins

- Remember to keep documenting everything as you go along!