Lab 2-1 - Install Jenkins

In this lab we will install jenkins, ready for configuration

Install Java

1. Before we install Jenkins, lets pre-install Java so we don't have that issue

```
$ sudo apt install default-jre
```

Follow prompts to install java

2. we need to add the gcp keys for the repository so the system knows to trust the new repo

```
$ wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo
apt-key add -

OK
```

3. Add the repository to the system

```
$ sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ >
/etc/apt/sources.list.d/jenkins.list'
```

4. Install Jenkins

```
$ sudo apt update
$ sudo apt install jenkins
```

5. Check to make sure it's running

```
$ systemctl status jenkins

● jenkins.service - LSB: Start Jenkins at boot time
    Loaded: loaded (/etc/init.d/jenkins; generated)
    Active: active (exited) since Thu 2020-05-21 01:01:51 UTC; 29s ago
    Docs: man:systemd-sysv-generator(8)
    Tasks: 0 (limit: 8939)
    Memory: 0B
    CGroup: /system.slice/jenkins.service
```

6. Add the jenkins user to the docker group and restart service

```
$ sudo usermod -aG docker jenkins
$ sudo systemctl restart jenkins
```

7. find the Initial admin password and copy it.

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

8. Go to the following address and paste the initial admin password

```
http://{your vm ip address}:8080/
```

Then click 'continue'

9. Choose 'Install Selected Plugins' and wait for software to finish initialising

10. Fill out information to create first admin user, make sure to record admin username and password (these computers will be de-provisioned after the workshop, feel free to use something basic like admin:admin)

11. Accept the Jenkins URL. in a real installation this would have to be static, but we're only going to use this today.

12. Install additional pluguns

    1. Select 'Manage Jenkins from the side menu
    2. Select 'Manage Plugins' from the list
    3. Select the 'Available' tab
    4. Type 'docker' into the filter box
    5. select 'docker-build-step' and 'Docker' then click 'Download now and install after restart'
    6. You may need to manually refresh this page after a couple of minutes

13. Click on 'Back to Dashboard' from the left side menu

14. Add some credentials to the credential store

    1. Select 'Credentials' from the side menu
    2. Click on 'Global' beside 'Jenkins'
    3. Click on 'adding some credentials'
    4. For the first credential enter your tenable access key in the username field, your secret key in the password field, and 'tenableApiCredentials' in the ID field
    5. For the second credential enter 'dockerHubCredentials' in the ID field and your docker username and password from yesterday.

15. Create a Docker build tool

    1. Go back to the main screen by clicking Jenkins in the top left corner.
    2. Select 'Manage Jenkins' from the side menu
    3. Select 'Global Tool configuration' from the list
    4. find 'Docker' towards the bottom of the page
    5. add 'myDocker' in the name field
    6. leave the 'Installation root' field empty to use the system path
    7. Click 'Save' at the bottom of the page