**Jenkins Build 2**

**Objectives:**
- Configure Unit tests with Jenkins
- Configure a second build node
  - This requires a second vm (we are going to use linux)
- Configure email-based notifications
- Integrate Jenkins and SonarQube

**Requirements:**
Continue where you left off on your last project with Jenkins. You will start in chapter 2 at the ‘Configuring JUnit’ section, and work to the end of the chapter.

**Plugins**
When configuring the dashboard view plugin, after configuring it, you must attach it to a build job. Attach it to your PetClinic build job you created in the last assignment. I don’t care what portlets you add.

**Nodes**
Configure a second VM as a build node. Though the book uses a windows machine, we will use a Linux vm as our second node. Make sure to install `default-jre`, `default-jdk`, `git`.

On that machine:
- Add a new user called `jenkins`
- As that new user, in their home directory, create a directory called `jenkins_slave`
- From the jenkins web interface, as you are adding your new node, use the following configuration:
  - remote root directory `/home/jenkins/jenkins_slave`
  - Launch slave agent via SSH
  - Configure the host ip of second machine
  - Add new credentials (will ask you for name and password of jenkins user)
  - Use non-verifying host strategy
- Verify the log status of the agent that it is online
- I ran my build project on this node at this point. You only need to edit your project settings and select where the project can run.
- Make sure that you can build your project on BOTH the `master` node and your new `slave` node.

**Very easy email settings**
Make sure you are in Email notification section NOT Extended email notification.
- SMTP server sol.cs.dixie.edu
- port 25
- put reply-to address as whatever you want
- test send an email
- make sure you get it

**SonarQube**
- I installed on same node as jenkins.
- Default username/password = admin/admin
- The real command to run it is `./sonar.sh start`
  - This has to be re-run if you reboot the node
- One thing that the text doesn’t make clear is that you MUST add a build step to your project to have the SonarQube scanner run.
I also found that my build failed with SonarQube, unless I added the following line to sonar-project.properties:

```
sonar.java.binaries=src
```

**Check off procedure:**

For this project, you should submit the following screenshots:

- JUnit tests are showing up
- That you have added some dashboard plugins
- That you can successfully execute a build job on a second node
- That you can receive an email notification (the test email notification is fine)
- That sonarqube has received some information from your build job.