

## READY and TESTED

If you can't follow these simple steps, go to next page to check the detail steps.

I forked the sakai.git, my link is: <https://github.com/a3994288/sakai.git>

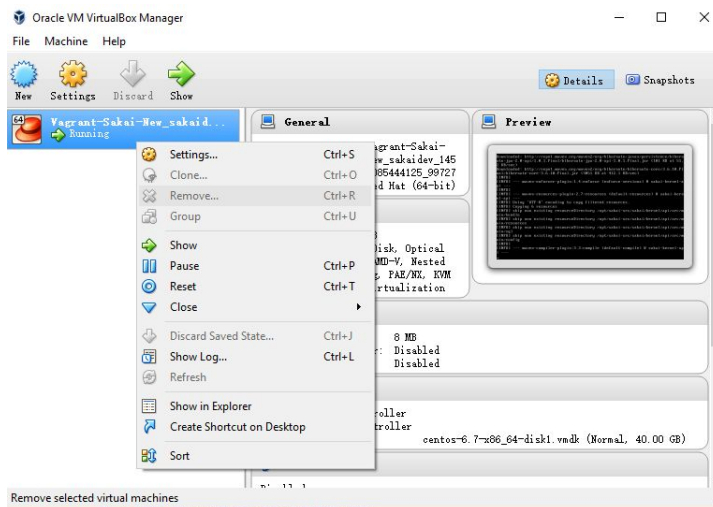
### Simple steps:

1. If you have already run vagrant up, please delete the old machine in Vbox before run this one **IMPORTANT**
2. **git clone** <https://github.com/a3994288/Vagrant-Sakai-New>
3. **vagrant up** (takes about 30-60 mins)
4. add to \$PATH: C:\Program Files\Git\usr\bin (if 64 bits)
5. **allocate more memory to the VM, at least 1.5GB (2GB preferred), you have to power off the VM to do so. IMPORTANT!!**
6. Now you have two options:
  - a. run command: **vagrant ssh**
  - b. OR you can just run the VM in Vbox, user:root, password:vagrant, after that you can run command: **startx**
7. suggest you run through Vbox, then start the GUI, easier for eclipse later.
8. reboot it again
9. command: **service mysqld restart**
10. command: **cd /opt/sakai-src/sakai**
11. command: **mvn install -Dmaven.test.skip** (takes 25 mins, only continue when successful)
12. command: **mvn clean install sakai:deploy -Dmaven.tomcat.home=/opt/tomcat** (40 mins)
13. command: **cd \$CATALINA\_HOME/bin**
14. run the command: **./startup.sh** you are supposed to wait for about 30 mins even it shows tomcat started.
15. <http://localhost:8888/portal> (if it shows loading, please wait, should not more than 30 mins)
16. <http://localhost:8080/portal> for the VM
17. login for sakai: admin/admin
18. to stop tomcat, run the command: **./shutdown.sh** should not see any error.
19. to start eclipse, **cd /opt/eclipse** THEN **./eclipse**
20. if anything happened during the installation, no need to reinstall the VM, do the following steps:
  - a. command: reboot
  - b. command: service mysqld restart
  - c. command: cd /root/.m2
  - d. command: rm -rf repository
  - e. command: cd /opt/tomcat
  - f. command: rm -rf webapps/\*
  - g. Go back to step 8
21. to finish the environment setup, please continue on step 13.e, and finish the rest on this website:  
<https://confluence.sakaiproject.org/display/BOOT/Development+Environment+Setup+Walkthrough>
  - a. step 13.e: just do it, link is/usr/java/jre1.8.0\_60
  - b. step 14: I do not think we need subclipse since we use github (Use EGit)
    - i. follow this link: <https://www.youtube.com/watch?v=ptK9-CNms98>
    - ii. Just install the EGit, do not import now

- c. step 15: DO NOT FOLLOW THE INSTRUCTION, use this link:<http://www.eclipse.org/m2e/>, instead of “software update”, click “install New Software”, however, I think it comes with the eclipse, no need to install unless you don’t have it.
- d. step 16: skip
- e. step 17: skip all and do the following:
  - i. Window -> Perspective -> Open Perspective -> Java
  - ii. Select Project and uncheck Build automatically
  - iii. File -> Import, enter /opt/sakai-src/sakai
  - iv. File -> Import -> maven -> Existing maven Projects into Workspace
  - v. Select /opt/sakai-src/sakai
  - vi. Only import the assignment project.

**DETAILS (Same steps as above, but in details):**

1. If you have already run vagrant up, please delete the old machine in Vbox before run this one **IMPORTANT**, you have to close-->stop the machine then remove it.



2. install git, virtualBox, Vagrant, restart
3. open cmd
4. run command: `cd C:\` [please use / if you are using Mac or Linux]
5. run command: `git clone https://github.com/a3994288/Vagrant-Sakai-New`

6. run command: `cd c:\Vagrant-Sakai-New`
7. run command: `vagrant up` (depends on the Internet, could take about 30-60 mins)

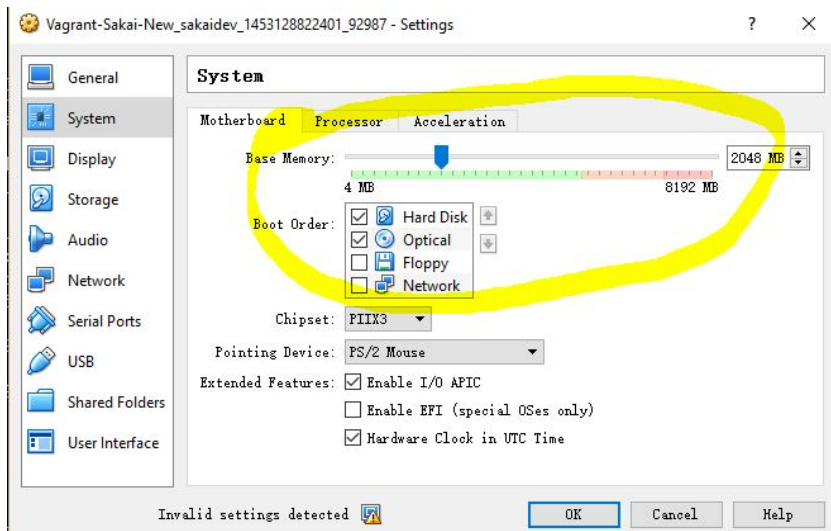
```
C:\Users\chang>cd c:\

c:\>git clone https://github.com/a3994288/Vagrant-Sakai-New
Cloning into 'Vagrant-Sakai-New'...
remote: Counting objects: 51, done.
remote: Compressing objects: 100% (37/37), done.
remote: Total 51 (delta 16), reused 36 (delta 4), pack-reused 0
Unpacking objects: 100% (51/51), done.
Checking connectivity... done.

c:\>cd Vagrant-Sakai-New

c:\Vagrant-Sakai-New>vagrant up
```

8. change system environment variables:
  - a. <http://www.nextofwindows.com/how-to-addedit-environment-variables-in-windows-7>
  - b. `PATH=%PATH%;C:\Program Files\Git\usr\bin` (if 64 bits)
  - c. `PATH=%PATH%;C:\Program Files (x86)\Git\bin` (for 32 bits)
9. **Adjust the VM memory to at least 1.5GB (2GB preferred), you have to power off the VM to do so. IMPORTANT!!**



10. Now you have two options:
  - a. run command: `vagrant ssh`
  - b. OR you can just run the VM in Vbox, user: `root`, password: `vagrant`, after that you can run command: `startx`
    - i. **double click the machine you just created to enter the VM**



11. suggest you run through Vbox, then start the GUI by command `startx`, easier for eclipse later.
12. start a terminal
13. reboot it again.

```
sakaidev login: root
Password:
[root@sakaidev ~]# reboot
```

14. command: `service mysqld restart`

15. command: `cd /opt/sakai-src/sakai`

16. command: `mvn install -Dmaven.test.skip` (takes 25 mins)

a. You should see “SUCCESSFUL” after this, otherwise, don’t continue.

```
[INFO] sakai-usermembership-pack ..... SUCCESS [ 0.188 s]
[INFO] sakai-usermembership-tool ..... SUCCESS [ 0.994 s]
[INFO] Sakai Web Project ..... SUCCESS [ 0.018 s]
[INFO] sakai-news-api ..... SUCCESS [ 0.139 s]
[INFO] sakai-news-impl ..... SUCCESS [ 7.223 s]
[INFO] sakai-news-pack ..... SUCCESS [ 0.148 s]
[INFO] sakai-news-tool ..... SUCCESS [ 0.958 s]
[INFO] sakai-web-api ..... SUCCESS [ 0.170 s]
[INFO] sakai-web-impl ..... SUCCESS [ 0.240 s]
[INFO] sakai-web-pack ..... SUCCESS [ 0.202 s]
[INFO] sakai-web-tool ..... SUCCESS [ 1.158 s]
[INFO] sakai-web-portlet ..... SUCCESS [ 0.592 s]
[INFO] Sakai WebServices Project ..... SUCCESS [ 0.039 s]
[INFO] Sakai Soap (CXF) ..... SUCCESS [ 12.409 s]
[INFO] Sakai base pom ..... SUCCESS [ 0.043 s]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 25:57 min
[INFO] Finished at: 2016-01-18T14:08:36+00:00
[INFO] Final Memory: 452M/769M
[INFO] -----
[root@sakaidev sakail#
```

17. command: `mvn clean install sakai:deploy -Dmaven.tomcat.home=/opt/tomcat` (40 mins)

```
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 37:00 min
[INFO] Finished at: 2016-01-18T23:51:38+00:00
[INFO] Final Memory: 427M/769M
[INFO] -----
```

18. go to tomcat dir by running command: `cd $CATALINA_HOME/bin`

19. run the command: `./startup.sh`

```
[root@sakaidev sakail# cd $CATALINA_HOME/bin
[root@sakaidev bin]# ./startup.sh
Using CATALINA_BASE: /opt/tomcat
Using CATALINA_HOME: /opt/tomcat
Using CATALINA_TMPDIR: /opt/tomcat/temp
Using JRE_HOME: /usr/java/jdk1.8.0_60
Using CLASSPATH: /opt/tomcat/bin/bootstrap
.jar
Tomcat started.
[root@sakaidev bin]#
```

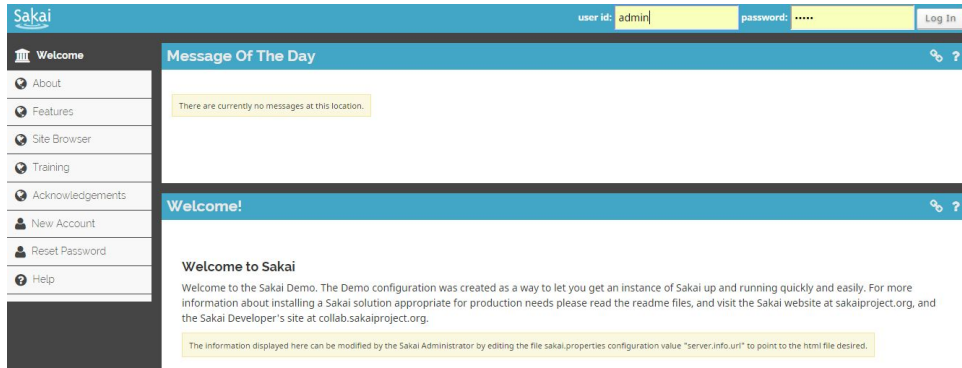
20. after that, you are supposed to wait for 30 mins, we do have a fix for that (hopefully), but apply it later. To see full details, run command: `./catalina.sh run` instead of `./startup.sh`

21. after tomcat started, you should be able to visit Sakai site in host machine.

22. login for sakai: admin/admin

23. <http://localhost:8888/portal> (if it shows loading, please wait, should not more than 30 mins)

24. <http://localhost:8080/portal> for the VM



25. I've installed the internet browser for the VM
26. to stop tomcat, go to the same directory, `cd /opt/tomcat/bin`, run the command:  
`./shutdown.sh`
  - a. you should NOT see any error when shutdown the tomcat, if you see a error relates to the port 8005, means it is not started properly.
27. eclipse is installed under /opt/eclipse
28. if anything happened during the installation, no need to reinstall the VM, do the following steps:
  - a. command: `reboot`
  - b. command: `service mysqld restart`
  - c. command: `cd /root/.m2`
  - d. command: `rm -rf repository`
  - e. command: `cd /opt/tomcat`
  - f. command: `rm -rf webapps/*`
  - g. Go back to step 13
29. to finish the environment setup, please continue on step 13.e, and finish the rest on this website:  
<https://confluence.sakaiproject.org/display/BOOT/Development+Environment+Setup+Walkthrough>
  - a. step 13.e: just do it, link is /usr/java/jre1.8.0\_60
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    - ii. Just install the EGit, do not import now
  - c. step 15: DO NOT FOLLOW THE INSTRUCTION, use this link: <http://www.eclipse.org/m2e/>, instead of "software update", click "install New Software"
  - d. step 16: skip
  - e. step 17: skip all and do the following:
    - i. Window -> Perspective -> Open Perspective -> Java
    - ii. Select Project and uncheck Build automatically
    - iii. File -> Import, enter /opt/sakai-src/sakai
    - iv. File -> Import -> Maven-> Existing maven Projects into Workspace
    - v. Select /opt/sakai-src/sakai

