**Load Testing**

1. Install the latest version of opensaas
2. run 'pkill node'
3. go to orchestratorService folder in terminal
4. run 'node server.js'
5. open another terminal tab and go to proxyService folder in terminal
6. run 'node server.js'
7. go to 'orchestratorservicemanagement.lvho.st:7000' on web browser
8. Add 3 more runners and make it so there are 5 runners total (Don't open more than that)
9. Open up a notebook to take notes
10. Open up the excel spreadsheet to record results
11. Open another tab and run 'sudo netstat -lptu'
12. Get the process id of whatever is listening to \*:cisco-sccp and label it in your notes as *Orchestrator Server*
13. Get the process id of whatever is listening to \*:3003 and label it in your notes as *Node Runner 1*
14. Get the process id of whatever is listening to \*:3004 and label it in your notes as *Node Runner 2*
15. Get the process id of whatever is listening to \*:3005 and label it in your notes as Node Runner 3
16. Get the process id of whatever is listening to \*:3006 and label it in your notes as Node Runner 4
17. Get the process id of whatever is listening to \*:3007 and label it in your notes as Node Runner 5
18. Get the process id of whatever is listening to \*:afs3-fileserver and label it in your notes as *Proxy Server*

**Test 1**

1. Have the app deployed on **ONLY 1** runner (verify this by doing to orchestratorservicemanagement.lvho.st:7000 in web browser)
2. Wait 2 minutes for the whole computer to stabilize
3. Run 'sudo netstat -lptu' again
4. Get the process id of whatever is listening to \*:4003 and label it in your notes as *Orchestrator Management App 1*
5. make sure nothing unnecessary is running on computer (eg. facebook)
6. Open a new tab and run: *ab -c 100 -n 1000000 [http://orchestratorservicemanagement.lvho.st:7000/#/](http://orchestratorservicemanagement.lvho.st:7000/" \l "/)*
7. In another tab, run: top
8. Take a screenshot of the terminal running top and save it as 1-runner.png

**Test 2**

1. Have the app deployed on **ONLY 2** runners (verify this by doing to orchestratorservicemanagement.lvho.st:7000 in web browser and deploy the app on 2 runners if necessary)
2. Wait 2 minutes for the whole computer to stabilize
3. Run 'sudo netstat -lptu' again
4. Get the process id of whatever is listening to \*:4004 and label it in your notes as *Orchestrator Management App 2*
5. make sure nothing unnecessary is running on computer (eg. facebook)
6. Open a new tab and run: *ab -c 100 -n 1000000 [http://orchestratorservicemanagement.lvho.st:7000/#/](http://orchestratorservicemanagement.lvho.st:7000/" \l "/)*
7. In another tab, run: top
8. Take a screenshot of the terminal running top and save it as 2-runner.png

**Test 3**

1. Have the app deployed on **ONLY 3** runners (verify this by doing to orchestratorservicemanagement.lvho.st:7000 in web browser and deploy the app on 3 runners if necessary)
2. Wait 2 minutes for the whole computer to stabilize
3. Run 'sudo netstat -lptu' again
4. Get the process id of whatever is listening to \*:4005 and label it in your notes as *Orchestrator Management App 3*
5. make sure nothing unnecessary is running on computer (eg. facebook)
6. Open a new tab and run: *ab -c 100 -n 1000000 [http://orchestratorservicemanagement.lvho.st:7000/#/](http://orchestratorservicemanagement.lvho.st:7000/" \l "/)*
7. In another tab, run: top

Take a screenshot of the terminal running top and save it as 3-runner.png

**Test 4**

1. Have the app deployed on **ONLY 4** runners (verify this by doing to orchestratorservicemanagement.lvho.st:7000 in web browser and deploy the app on 4 runners if necessary)
2. Wait 2 minutes for the whole computer to stabilize
3. Run 'sudo netstat -lptu' again
4. Get the process id of whatever is listening to \*:4006 and label it in your notes as *Orchestrator Management App 4*
5. make sure nothing unnecessary is running on computer (eg. facebook)
6. Open a new tab and run: *ab -c 100 -n 1000000 [http://orchestratorservicemanagement.lvho.st:7000/#/](http://orchestratorservicemanagement.lvho.st:7000/" \l "/)*
7. In another tab, run: top

Take a screenshot of the terminal running top and save it as 4-runner.png