

TEST FRAMEWORK CHALLENGE

UI testing with Docker/Selenoid

GOAL

- To set up a testing system consisting of Selenium, GGR and a trivial test case (let's say: open browser, go to google.com). These are the relevant projects, containing also links to documentation: <https://github.com/aerokube/selenium> <https://github.com/aerokube/ggr> <https://github.com/aerokube/cm>.
- What we expect from you would be e.g. a collection of a docker compose file with config files for the various components and the test case, ideally in e.g. a git repo.

WHERE DO I STAND?

- What do I know?
 - Docker
 - Selenium
 - Load Balancing
 - Configuration Manager
 - Git

- What I do not?
 - Docker compose
 - Selenoid
 - GGR Load balancer
 - CM

APPROACH- LEARNING BY DOING

- Installing Docker on Mac
- Registering on Docker site
- Creating New repository
- Logging to GitHub, creating new repository
- Connecting Docker repo with GitHub repo
- Downloading the solenoid docker image

SELENOID WITH CM

- Why Selenoid?
 - <https://hackernoon.com/selenium-testing-a-new-hope-7fa87a501ee9>
 - <https://hackernoon.com/selenium-testing-a-new-hope-a00649cdb100>
- Hello World Selenoid!
 - `curl -Lo cm https://github.com/aerokube/cm/releases/download/1.2.0/cm_darwin_amd64`
 - `./cm selenoid start —vnc`
- Created a sample test, ran it on Chrome successfully. No luck with Firefox :(
 - <https://github.com/nightwatchjs/nightwatch/issues/1628>
- What's wrong with <http://localhost:4444/wd/hub/> while <http://localhost:8080> Working fine!
 - Selenoid was created to be run in big Selenium clusters and thus has no built-in user interface. This is why trying to open an URL above in browser returns **404** and this is the expected behavior :)

DOCKER-COMPOSE

- What is it and Why do we need it?
 - <https://github.com/prvenkat22/automation.git> - [docker-compose.yaml](#)

DOCKER GGR

- Failed to start docker on default path, solution-
 - `docker run -d --name ggr -v /tmp/grid-router:/tmp/grid-router --net host aerokube/ggr:latest-release`

volumes:

- `"/tmp/selenoid:/etc/selenoid/"` # assumed current dir contains browsers.json

Issues faced and resolved:

- <https://github.com/aerokube/cm/issues/50>
- <https://github.com/aerokube/selenoid/issues/155>

CM WAY OF SELENOID

1. Configure and Download selenium
 - `./cm selenium configure [--browsers firefox,chrome] [--last-versions 2] [--tmpfs 128]`
2. Start selenium
 - `./cm selenium start --vnc`
3. Download and start selenium-ui
 - `./cm selenium-ui start`
4. Run tests pointing to <http://localhost:4444>
 - `./node_modules/nightwatch/bin/nightwatch ./src/test/login.js ./src/test/login.l.js -e chrome`