

01_Setup Selenium in Centos 7

Notebook: 01_Setup Enviroiment

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Guide

Setup Selenium In Centos 7

1. Environment :

- Centos 7
- Python 2.7.5
- Selenium 3.3.3
- Xvfb 1.17.2
- google-chrome-stable 58.0
- ChromeDriver 2.29

2. Structred

2.1 Selenium + Python + Pip

```
yum install python-pip  
pip install selenium
```

2.2 Xvfb

Step 1: Install xvfb

```
yum install xorg-x11-server-Xvfb
```

Step 2: Tạo service cho Xvfb, Xvfb sẽ được quản lý như một service

```
vi /usr/lib/systemd/system/Xvfb.service
```

Step 3: Pase nội dung bên dưới

```
[Unit]  
Description=Virtual Framebuffer X server for X Version 11  
  
[Service]  
Type=simple  
EnvironmentFile=-/etc/sysconfig/Xvfb  
ExecStart=/usr/bin/Xvfb $OPTION  
ExecReload=/bin/kill -HUP ${MAINPID}  
  
[Install]  
WantedBy=multi-user.target
```

Step 4: Tạo file chứa tham số cho Xvfb

```
vi /etc/sysconfig/Xvfb
```

Step 5: Paste nội dung

```
# Xvfb Environment File
OPTION=":1 -screen 0 1366x768x24"
```

Step 6 : Start service Xvfb

```
systemctl enable Xvfb
systemctl start Xvfb
```

2.3 Chrome

Step 1 : Tạo file repos cho chrome

```
vi /etc/yum.repos.d/google-chrome.rep
```

Step 2: Copy paste

```
[google-chrome]
name=google-chrome
baseurl=http://dl.google.com/linux/chrome/rpm/stable/\$basearch
enabled=1
gpgcheck=1
gpgkey=https://dl-ssl.google.com/linux/linux\_signing\_key.pub
```

Step 3: Install chrome

```
yum install google-chrome-stable
```

Step 4: Install font dành cho tiếng nhật, (Not required)

```
yum install ipa-pgothic-fonts.noarch
```

Step 5: Download chrome driver. Copy vào folder /usr/local/bin

```
wget http://chromedriver.storage.googleapis.com/2.29/chromedriver\_linux64.zip
unzip chromedriver_linux64.zip
mv chromedriver /usr/local/bin
rm chromedriver_linux64.zip
```

3. Test

Step 1 : Tạo file test.py như bên dưới

```
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.webdriver.common.keys import Keys
from selenium.webdriver.support.ui import Select
from selenium.common.exceptions import NoSuchElementException
from selenium.common.exceptions import NoAlertPresentException
import selenium.webdriver.chrome.service as service
class Sample():
    def __init__(self):
        self.aservice = service.Service('/usr/local/bin/chromedriver')
```

```

        self.aservice.start()
        capabilities = {'chrome.binary': '/usr/bin/google-chrome-stable', "chromeOptions":
{"args": ['--no-sandbox']}}
        self.driver = webdriver.Remote(self.aservice.service_url, capabilities)
        self.driver.implicitly_wait(3)
        self.base_url = "https://vnexpress.net"
    def __del__(self):
        self.driver.close()
    def sample(self):
        driver = self.driver
        try:
            driver.get(self.base_url)
            driver.find_element_by_id("myvne_taskbar")
            print driver.text
        except:
            print "Error"
        finally:
            print "done"
sample = Sample()
sample.sample()

```

Step 2: Run

```
export DISPLAY=localhost:1.0; python test.py
```

Step 3: Tạo Schedule cho file bằng cront

Open crontab :

```
crontab -e
```

Edit :

```

0 9 * * * export DISPLAY=localhost:1.0; python /root/selenium/sample.py
0 9 * * * export DISPLAY=localhost:1.0; python /root/selenium/sample.py

0 4 * * * pkill -KILL -f chromedriver

```

4. Point

- Không thể sử dụng Cron để chạy đồng thời nhiều task có sử dụng [Selenium.webdriver.chrome.service] được. Tại một thời điểm chỉ có thể thực thi 1 task.
- Khi thực hiện lệnh [self.driver.close()], browser chrome sẽ kết thúc, tuy nhiên process ChromeDriver vẫn tiếp tục chạy, vì vậy cần sử dụng pkill -KILL -f chromedriver để kill process

Link tham khảo :

- <https://qiita.com/kotanbo/items/093fc71b71ee5f20baf0>