

Installing Selenium and ChromeDriver on Ubuntu

May 29, 2015

I recently got Selenium, Google Chrome, and ChromeDriver installed and working on a VM running 64-bit Ubuntu 14.04. Here's how:

First, install Google Chrome for Debian/Ubuntu:

```
sudo apt-get install libxss1 libappindicator1 libindicator7
wget https://dl.google.com/linux/direct/google-chrome-stable_current_amd64

sudo dpkg -i google-chrome*.deb
sudo apt-get install -f
```

Now, let's install `xvfb` so we can run Chrome headlessly:

```
sudo apt-get install xvfb
```

Install ChromeDriver:¹

```
sudo apt-get install unzip

wget -N http://chromedriver.storage.googleapis.com/2.26/chromedriver_linux64.zip
unzip chromedriver_linux64.zip
chmod +x chromedriver

sudo mv -f chromedriver /usr/local/share/chromedriver
sudo ln -s /usr/local/share/chromedriver /usr/local/bin/chromedriver
sudo ln -s /usr/local/share/chromedriver /usr/bin/chromedriver
```

Install some Python dependencies and Selenium:

```
# Install pip:
sudo apt-get install python-pip

## (Optional) Create and enter a virtual environment:
# sudo apt-get install python-virtualenv
# virtualenv env
```

```
# source env/bin/activate

# Install Selenium and pyvirtualdisplay:
pip install pyvirtualdisplay selenium
```

Now, we can do stuff like this with Selenium in Python:

```
from pyvirtualdisplay import Display
from selenium import webdriver

display = Display(visible=0, size=(800, 600))
display.start()
driver = webdriver.Chrome()
driver.get('http://christopher.su')
print driver.title
```

Footnotes

1: You can find all the ChromeDriver releases [here](#). If you're using a 32-bit system or a non-Linux OS, the ChromeDriver download used above won't work.

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Christopher Su



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richardellicott • 3 years ago

this is rather cool

not only does it solve my selenium issue with Ubuntu, but you have added an extra feature i was not aware of that can be used only with linux

this makes my linux scraper potentially superior (although i am opting not to use this at the moment, due to the way i'm working cross platform)

thanks very much!

6 ^ | v • Reply • Share >



Theodore R. Smith • 4 years ago

You never showed how to install Selenium ;(

4 ^ | v 3 • Reply • Share >



Tan Ory Jaka Perdana → Theodore R. Smith • 3 years ago

he did

1 ^ | v • Reply • Share >



Christopher Su Mod → Theodore R. Smith
• 4 years ago • edited

Selenium is installed by this line in the post: "pip install pyvirtualdisplay selenium".

1 ^ | v • Reply • Share >



adolfo camacho → Theodore R. Smith • 4 years ago • edited

please try, pip install -U selenium

<https://pypi.python.org/pyp...>

1 ^ | v • Reply • Share >



Cliff Wildman • 4 years ago • edited

this saved me quite a bit of time. thank you very much!

two requests - can you edit the instructions and add that the latest chromedriver should be used? Using 2.20 selenium can't connect. Using 2.26 all worked great.

also a note that if things go wrong, to use 'rm' and remove chromedriver from bin as typical dpkg apt-install remove doesnt work because executable moved from zip.

Thanks again. Great stuff.

1 ^ | v • Reply • Share >



Christopher Su Mod → Cliff Wildman • 4 years ago

Updated post to use 2.26. Thanks!

^ | v • Reply • Share >



Kostasnos • 5 years ago

Thank you! it helps a lot

1 ^ | v • Reply • Share >



Joey Jiao • 5 years ago

Message: chrome not reachable (Driver info:



chrome_options = webdriver.ChromeOptions()

chromedriver=2.20.353124

(035346203162d32c80f1dce587c8154a1efa0c3b),platform=Linux

3.1.9-vs2.3.2.5vs2.3.2.5+ x86_64)

Does it mean I need to install another version driver than yours?

1 ^ | v • Reply • Share >



shaunpud → Joey Jiao • 5 years ago

I was receiving the same error and found adding the "--no-sandbox" option fixed it.

```
chrome_options = webdriver.ChromeOptions()
```

```
chrome_options.add_argument('--no-sandbox')
```

```
chrome = webdriver.Chrome('/usr/local/bin/chromedriver',
```

```
chrome_options=chrome_options)
```

4 ^ | v • Reply • Share >



siddhesh suthar → shaunpud • 4 years ago

thanks a lot!

^ | v • Reply • Share >



Ryan Millner • 5 years ago

This was super helpful and worked like a charm, thank you so much! I used xvfb instead of the virtual env, but the hard part for me was getting Chrome webdriver installed which this fixed

1 ^ | v • Reply • Share >



Christopher Su Mod → Ryan Millner • 5 years ago

Glad it helped!

1 ^ | v • Reply • Share >



Mohsin Ashraf • 7 months ago

This is really amazing!

^ | v • Reply • Share >



pure Indian • 2 years ago

Hi,

Below is my code, but doesn't I get the chrome pop-up at all, any idea?

```
from selenium import webdriver
```

```
from selenium.webdriver.common.keys import Keys
```

```
from selenium.webdriver.chrome.options import Options
```

```
# create a new chrome session
```

```
options = Options()
options.add_argument('--headless')
options.add_argument('--no-sandbox')
driver = webdriver.Chrome(chrome_options=options,
executable_path="/home/amitesh/Downloads/selenium/chromedriver
driver.implicitly_wait(30)
driver.maximize_window()
```

```
# Navigate to the application home page
driver.get("http://www.google.com")
```

^ | v • Reply • Share ›



Michael Kingsley • 2 years ago

Thank you very much.
This really helped me alot.

^ | v • Reply • Share ›



Egor Red • 2 years ago

works fine, thanks

^ | v • Reply • Share ›



Felipe Braga • 3 years ago

This finally worked. Thank you so much man!

^ | v • Reply • Share ›



Stephen Bradshaw • 3 years ago

Great article. Thank you. This works in Unbuntu 16.04 as well.

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Vishal Bhandare • 3 years ago

How to read website contents using chromedriver and selenium?

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Manish Jakhode • 3 years ago • edited





see more

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VISHNU VARDHAN • 4 years ago

i am getting this error please help me regarding
`sudo ln -s /usr/local/share/chromedriver /usr/local/bin/chromedriver`
ln: failed to create symbolic link '/usr/local/bin/chromedriver': File exists

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Marcos Roberto Vrielink • 4 years ago

Thanks, very good tutorial.

^ | v • Reply • Share >



sugiono • 4 years ago

hello,

do you know how to get pyvirtualdisplay on python3.5?

i search on the net, and tried all, but always locate the
pyvirtualdisplay on python 2.7

regards,
Sugiono

^ | v • Reply • Share >



MtoTheM • 4 years ago

Can someone explain to me what these two lines do?

```
sudo ln -s /usr/local/share/chromedriver /usr/local/bin/chromedriver
sudo ln -s /usr/local/share/chromedriver /usr/bin/chromedriver
```

I tried to setup Chrome and Selenium in AWS EC2 and constantly
ran into issues having to do with "... needs to be in PATH" and
"chromedriver has not the right permission" kind of stuff. I think the
above lines were the critical part which changed that, but I have no
idea how...

Thanks!

^ | v • Reply • Share >

**bo** • 4 years ago

you are a god.

^ | v • Reply • Share ›

**Chhaya Kurani** • 4 years ago

Great.. It solved my error.. Which came after up-gradation of chrome.

Thanks a lot :)

^ | v • Reply • Share ›

**Alexis Bustamante Calvario** • 4 years ago

Hi, I need some help, it shows me this error:

`display = Display(visible=0, size=(800, 600))``EasyProcessCheckInstalledError: cmd=['Xvfb', '-help']`

But Xvfb is already installed, what could be happening?

^ | v • Reply • Share ›

**lata** • 5 years ago

When we change the below, should it open the chrome browser instead of headless?

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