
pyvirtualdisplay Documentation

Release 0.0.3

ponty

July 05, 2011

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pyvirtualdisplay

Date July 05, 2011

PDF [pyvirtualdisplay.pdf](#)

Contents:

pyvirtualdisplay is a python wrapper for [Xvfb](#) and [Xephyr](#)

home: <https://github.com/ponty/PyVirtualDisplay>

documentation: <http://ponty.github.com/PyVirtualDisplay>

Possible applications:

- GUI testing
- automatic GUI screenshot

BASIC USAGES

Start Xephyr:

```
from pyvirtualdisplay import Display
xephyr=Display(visible=1, size=(320, 240)).start()
```

Create screenshot of xmessage with Xvfb:

```
from easyprocess import EasyProcess
from pyvirtualdisplay.smartdisplay import SmartDisplay
disp = SmartDisplay(visible=0, bgcolor='black').start()
xmessage = EasyProcess('xmessage hello').start()
img = disp.waitgrab()
xmessage.stop()
disp.stop()
img.show()
```

INSTALLATION

2.1 General

- install `Xvfb` and `Xephyr`.
- install `setuptools` or `pip`
- optional: `pyscreenshot` and `PIL` should be installed for `pyvirtualdisplay.smartdisplay`
- install the program:

if you have `setuptools` installed:

```
# as root
easy_install pyvirtualdisplay
```

if you have `pip` installed:

```
# as root
pip install pyvirtualdisplay
```

2.2 Ubuntu

```
sudo apt-get install python-setuptools
sudo apt-get install xvfb
sudo apt-get install xserver-xephyr
sudo easy_install pyvirtualdisplay
# optional
sudo apt-get install python-imaging
sudo apt-get install scrot
sudo easy_install pyscreenshot
```

2.3 Uninstall

```
# as root
pip uninstall pyvirtualdisplay
```

USAGE

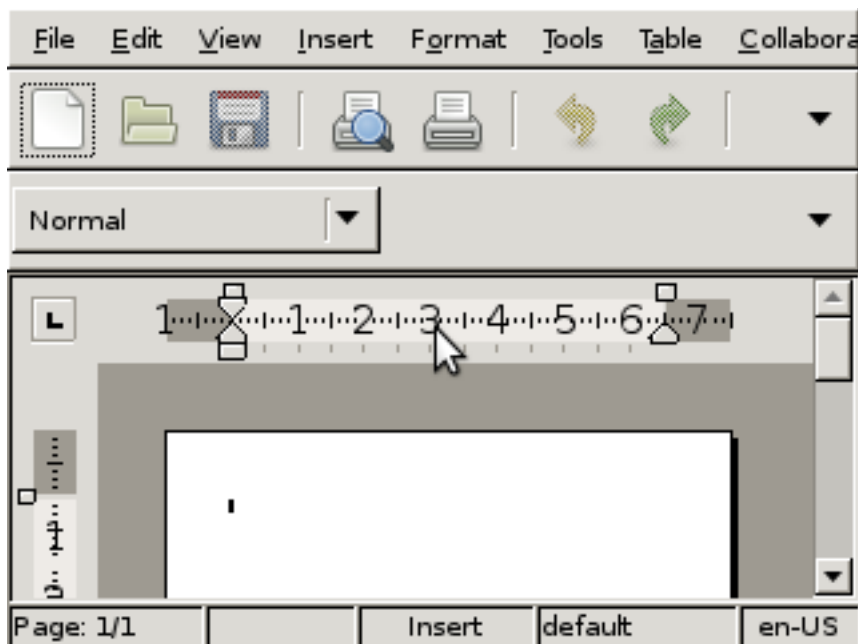
3.1 GUI Test

Testing abiword on low resolution:

```
from easyprocess import EasyProcess
from pyvirtualdisplay import Display
```

```
Display(visible=1, size=(320, 240)).start()
EasyProcess('abiword').start()
```

```
$ python -m pyvirtualdisplay.examples.lowres
```



3.2 Screenshot

Create screenshot of xmessage in background:

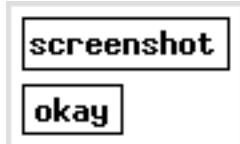
```

from easyprocess import EasyProcess
from pyvirtualdisplay.smartdisplay import SmartDisplay

disp = SmartDisplay(visible=0, bgcolor='black').start()
xmessage = EasyProcess('xmessage screenshot').start()
img = disp.waitgrab()
xmessage.stop()
disp.stop()
img.show()

```

```
$ python -m pyvirtualdisplay.examples.screenshot1
```



The same with wrap() function:

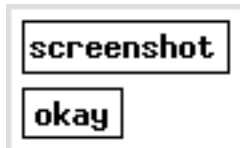
```

from easyprocess import EasyProcess
from pyvirtualdisplay.smartdisplay import SmartDisplay

disp = SmartDisplay(visible=0, bgcolor='black')
func = disp.wrap(EasyProcess('xmessage screenshot').wrap(disp.waitgrab))
img=func()
img.show()

```

```
$ python -m pyvirtualdisplay.examples.screenshot2
```



The same using with statement:

```

'''
using :keyword: 'with' statement
'''

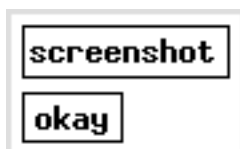
from easyprocess import EasyProcess
from pyvirtualdisplay.smartdisplay import SmartDisplay

with SmartDisplay(visible=0, bgcolor='black') as disp:
    with EasyProcess('xmessage screenshot'):
        img = disp.waitgrab()

img.show()

```

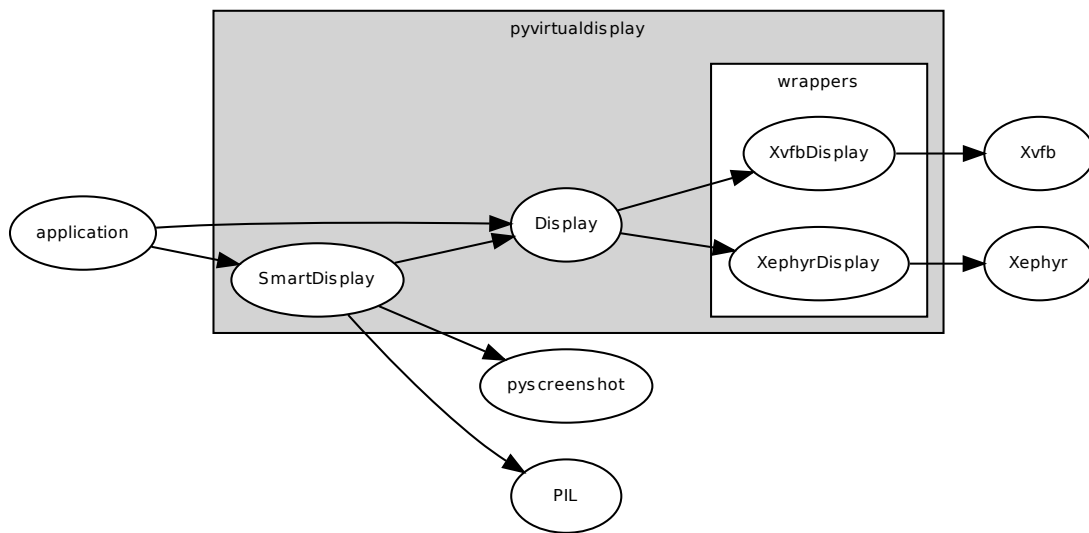
```
$ python -m pyvirtualdisplay.examples.screenshot3
```



API

```
class pyvirtualdisplay.Display (visible=False, size=(1024, 768), color_depth=24, bg-  
                                color='black')  
    Common class for XvfbDisplay and XephyrDisplay  
  
    start ()  
        start display  
        Return type self  
  
    stop ()  
        stop display  
        Return type self  
  
    wrap (callable, delay=0)  
        returns a function which:  
            1. start process  
            2. call callable, save result  
            3. stop process  
            4. returns result  
        similar to with statement  
        Return type
```

HIERARCHY



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