
pyscreenshot Documentation

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ponty

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pyscreenshot

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PDF [pyscreenshot.pdf](#)

Contents:

The `pyscreenshot` module can be used to copy the contents of the screen to a [PIL](#) image memory or file. Replacement for the [ImageGrab](#) Module, which works on Windows only.

Links:

- home: <https://github.com/ponty/pyscreenshot>
- documentation: <http://ponty.github.com/pyscreenshot>

Features:

- Crossplatform wrapper
- Capturing the whole desktop
- Capturing an area
- saving to file or [PIL](#) image memory
- some backends are based on this discussion: <http://stackoverflow.com/questions/69645/take-a-screenshot-via-a-python-script-linux>
- **Plugin based, it has wrappers for various backends:**
 - [scrot](#)
 - [ImageMagick](#)
 - [PyGTK](#)
 - [PIL](#) (only on windows)
 - [PyQt4](#)
 - [wxPython](#)

Known problems:

- not implemented: Capturing an active window
- different backends generate slightly different images from the same desktop, this should be investigated
- [ImageMagick](#) creates [blackbox](#) on some systems
- [PyGTK](#) backend does not check `$DISPLAY` -> not working with Xvfb
- slow: 0.2s - 0.7s

Similar projects:

- <http://sourceforge.net/projects/gtkshots/>

USAGE

Example:

```
import pyscreenshot as ImageGrab

# fullscreen
im=ImageGrab.grab()
im.show()

# part of the screen
im=ImageGrab.grab(bbox=(10,10,500,500))
im.show()

# to file
ImageGrab.grab_to_file('im.png')
```

INSTALLATION

2.1 General

- install `setuptools` or `pip`
- install `PIL`
- install at least one backend
- install the program:

if you have `setuptools` installed:

```
# as root
easy_install pyscreenshot
```

if you have `pip` installed:

```
# as root
pip install pyscreenshot
```

2.2 Ubuntu

```
# one or more
sudo apt-get install scrot
sudo apt-get install imagemagick
sudo apt-get install python-gtk2
sudo apt-get install python-qt4
sudo apt-get install python-wxversion

# Python Imaging Library (required)
sudo apt-get install python-imaging

sudo apt-get install python-setuptools
sudo easy_install pyscreenshot
```

2.3 Uninstall

```
# as root
pip uninstall pyscreenshot
```

EXAMPLES

pyscreenshot/examples/show.py:

```
from pyscreenshot import grab
from entrypoint2 import entrypoint

@entrypoint
def show():
    im = grab(bbox=(100, 200, 300, 400))
    im.show()
```

to start:

```
python -m pyscreenshot.examples.show
```

pyscreenshot/examples/showall.py:

```
from pyscreenshot.backendloader import BackendLoader
from pyscreenshot.loader import PluginLoaderError
import pyscreenshot as ImageGrab
import time
from entrypoint2 import entrypoint

@entrypoint
def show():
    im=[]

    backends = BackendLoader().all_names
    for x in backends:
        BackendLoader().force(x)
        try:
            im.append(ImageGrab.grab(bbox=(100,200,300,400)))
            print 'grabbing by '+x
        except PluginLoaderError as e:
            print e

    for x in im:
        x.show()
        time.sleep(1)
```

to start:

```
python -m pyscreenshot.examples.showall
```

BACKEND PERFORMANCE

```
$ python -m pyscreenshot.check.speedtest
/usr/lib/pymodules/python2.6/gtk-2.0/gtk/__init__.py:127: RuntimeWarning: PyOS_InputHook is not available
  set_interactive(1)
```

```
n=10 , to_file: True , bounding box: None
```

```
-----
scrot                1.8 sec
imagemagick          7.7 sec
pyqt                 1.9 sec
pygtk                2.7 sec
wx                   2.3 sec
pil                  Forced backend not found, or cannot be loaded:pil
```

```
n=10 , to_file: False , bounding box: None
```

```
-----
scrot                1.8 sec
imagemagick          7.7 sec
pyqt                 1.4 sec
pygtk                2.7 sec
wx                   0.5 sec
pil                  Forced backend not found, or cannot be loaded:pil
```

```
n=10 , to_file: False , bounding box: (10, 10, 20, 20)
```

```
-----
scrot                2.3 sec
imagemagick          4.3 sec
pyqt                 1.9 sec
pygtk                3.1 sec
wx                   0.5 sec
pil                  Forced backend not found, or cannot be loaded:pil
```

Test system versions:

```
$ python -m pyscreenshot.check.versions
/usr/lib/pymodules/python2.6/gtk-2.0/gtk/__init__.py:127: RuntimeWarning: PyOS_InputHook is not available
  set_interactive(1)
```

```
pyscreenshot        0.2.1
scrot                0.8
imagemagick          6.6.2
pyqt                 not implemented
pygtk                2.21.5
wx                   2.8.11.0
pil                  missing
```


COMMAND LINE HELP

```
$ python -m pyscreenshot.examples.show --help
usage: show.py [-h] [--debug]
```

optional arguments:

- h, --help show this help message and exit
- debug set logging level to DEBUG

```
$ python -m pyscreenshot.examples.showall --help
usage: showall.py [-h] [--debug]
```

optional arguments:

- h, --help show this help message and exit
- debug set logging level to DEBUG

```
$ python -m pyscreenshot.check.speedtest --help
usage: speedtest.py [-h] [--debug]
```

optional arguments:

- h, --help show this help message and exit
- debug set logging level to DEBUG

```
$ python -m pyscreenshot.check.versions --help
usage: versions.py [-h] [--debug]
```

optional arguments:

- h, --help show this help message and exit
- debug set logging level to DEBUG

API

`pyscreenshot.grab(bbox=None)`

Copy the contents of the screen to PIL image memory.

Parameters **bbox** – optional bounding box

`pyscreenshot.grab_to_file(filename)`

Copy the contents of the screen to a file.

Parameters **filename** – file for saving

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