pyscreenshot Documentation

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ponty

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CONTENTS

1 Usage 2

2 Installation 3
  2.1 General 3
  2.2 Ubuntu 3
  2.3 Uninstall 3

3 Backend performance 4

4 command line help 5

5 API 6

6 Indices and tables 7

Python Module Index 8

Index 9

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/

CHAPTER

ONE

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’)
```

CHAPTER

TWO

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
```

CHAPTER THREE

BACKEND PERFORMANCE

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

n=10 , to_file: True , bounding box: None
------------------------------------------------------
scrot                 2.2 sec
imagemagick           7.1 sec
pyqt                  2.2 sec
pygtk                 3.2 sec
wx                    2.8 sec
pil                   Forced backend not found, or cannot be loaded:pil

n=10 , to_file: False , bounding box: None
------------------------------------------------------
scrot                 3.0 sec
imagemagick           6.8 sec
pyqt                  1.9 sec
pygtk                 3.2 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                 3.6 sec
imagemagick           3.0 sec
pyqt                  2.4 sec
pygtk                 3.6 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 avail
  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
```

CHAPTER

FOUR

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
```

CHAPTER

FIVE

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

CHAPTER

SIX

INDICES AND TABLES

- *genindex*
- *modindex*
- *search*

PYTHON MODULE INDEX

p

pyscreenshot, 6

INDEX

G

grab() (in module pyscreenshot), 6
grab_to_file() (in module pyscreenshot), 6

P

pyscreenshot (module), 6