
pylinux Documentation

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`pylinux` is a Python interface to system information on Linux systems. It uses simple text processing to read system files and also wraps number of functionalities exposed by standard modules such as `os`, `platform` and `sys` to expose a single easy to use Python interface to such information.

```
os | platform | sys | system files
  |
  |
 \_/
 pylinux
```

Contents

1.1 Quick Start

pylinux consists of two modules: *pylinux.py* and *readproc.py*. The *pylinux* module uses the *readproc* module for some of its functionalities.

1.1.1 Installation

virtualenv install

```
$ virtualenv pylinux
$ cd pylinux
$ git clone https://github.com/amitsaha/pylinux
$ cd pylinux
$ python setup.py install
```

System-wide install

```
$ git clone https://github.com/amitsaha/pylinux
$ cd pylinux
$ sudo python setup.py install
```

1.1.2 Usage

To use the *pylinux* module, import it as

```
import pylinux.pylinux as pylinux
```

Similarly, to use the *readproc* module, use it as

```
import pylinux.readproc as readproc
```

The example script *examples/example.py* demos most of the features of the *pylinux* module. When you run it, you can see various information about your system

```
$ ./example.py
Distribution::: Fedora 17 Beefy Miracle
OS Architecture::: i686
Kernel::: 3.6.3-1.fc17.i686
Total Memory::: 1016932 kB
Processor: 0 Physical ID: 0
```

```
Processor: 1 Physical ID: 0
Processor: 2 Physical ID: 0
Processor: 3 Physical ID: 0
Hostname:: zion-minor
IP Address to connect to external server:: 192.168.101.238
System Uptime:: 143.226058333 hours
Time of Last Boot:: ['2012-12-14', '20:44']
Current Users:: gene gene gene gene gene gene
Free Memory:: 95516 kB
Number of Processes:: 190
Number of Open Files:: 22439
Average Load:: (0.13, 0.31, 0.41)
Network Devices::
em1: Recieved (MB): 35.6341457367 Transmitted (MB): 12.3657217026
wlan0: Recieved (MB): 274.533976555 Transmitted (MB): 105.382452011
```

1.1.3 Web application

The `flask_app` directory in `examples`, contains a rudimentary Flask web application which uses `pylinux` to expose various information about your system. It also uses `jQuery` and `smoothie` charts to update dynamic statistics, such as the free memory and network device statistics.

Install Flask using :: \$ pip-python install flask

To start the web application, go to the `examples/flask_app` directory and run the `app.py` file, like so

```
$ python app.py
* Running on http://0.0.0.0:5000/
* Restarting with reloader
```

Now, visit the URL `http://<your ip>:5000` and you should see a page similar to :



1.2 Implementation details

API Documentation

- modindex