Little things that PyPy makes possible

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Python

- Python is great
- Python is a glue language
- Python is slow

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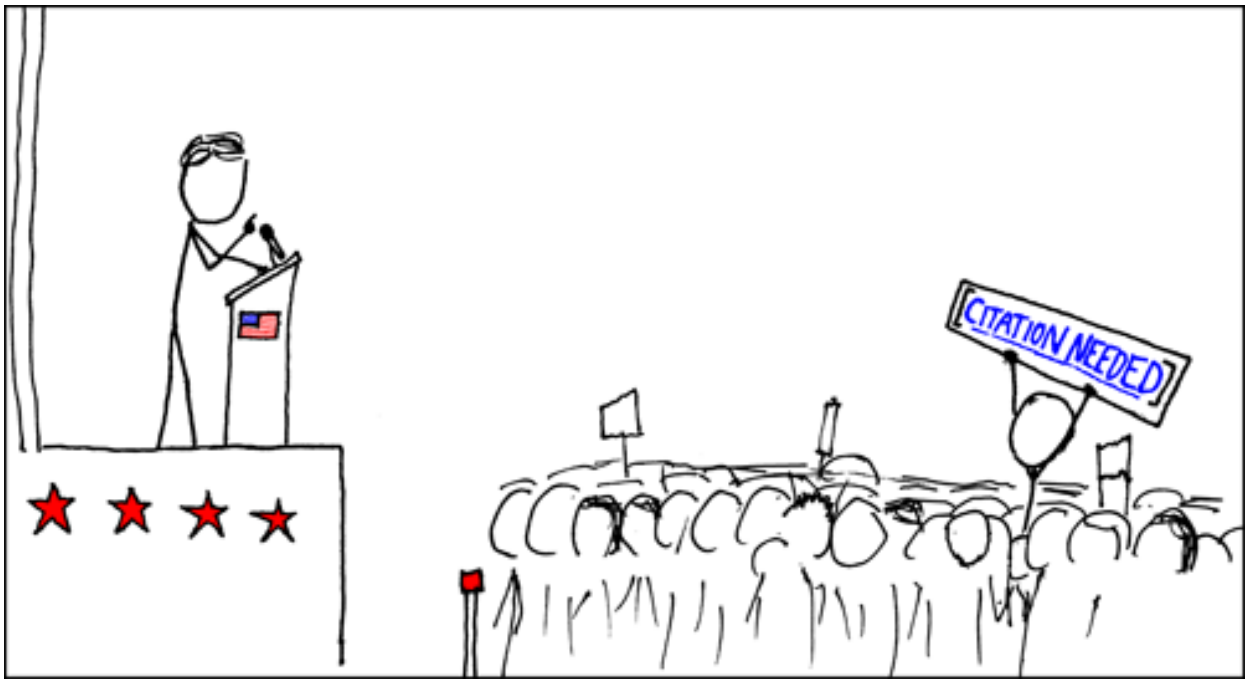
Is python slow?



- http://blog.bossylobster.com/2011/08/lesson-v8-can-teach-python-and-other.html

- PyPy **29 wins**, Node.js (V8) **20 wins**, one tie

What is PyPy?

- PyPy is many things
- **just another python implementation**

```
pypy x.py
```

What is PyPy (2)?

- Comes with a JIT compiler
- Stackless
- fast

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How fast is PyPy?

PyPy 1.6 - status

- Released on 16th of August
- Python 2.7.1
- The most compatible alternative to CPython
- Most programs just work
- (C extensions might not)

PyPy 1.6 - status (2)

- numpy (in progress)
- ctypes (fast)
- stable and compatible

PyPy 1.6 - what you can do

- try using on your own programs
- a lot of libraries just work
- your programs need either no or minimal changes

Real world use case (1)

- LWN's gitdm
  - http://lwn.net/Articles/442268/
  - data mining tool
  - reads the output of `git log`
  - generate kernel development statistics
- Performance
  - CPython: 63 seconds
  - PyPy: **21 seconds**

lwn.net

> *[...] PyPy is ready for prime time; it implements the (Python 2.x) language faithfully, and it is fast.*

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- **MyHDL**: VHDL-like language written in Python
  - http://www.myhdl.org/doku.php/performance
  - (now) competitive with “real world” VHDL and Verilog simulators

myhdl.org

> *[...] the results are spectacular. By simply using a different interpreter, our simulations run 6 to 12 times faster.*

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How you can help?

- Try it on your application
  - if it's slow, we want to know!
  - if it does not work, too :-)
  - if it works and it's fast, that as well
- Tell people about PyPy
- Contribute to PyPy! (it's not **that** hard :-))
- Donate (py3k, numpy)

Things you can do with Python using PyPy

- real time video processing
- software-rendered games
- this is just the beginning!

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Contacts, Q/A

- http://pypy.org
- blog: http://morepypy.blogspot.com
- mailing list: pypy-dev@python.org
- IRC: #pypy on freenode

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- fijall@gmail.com