

pydoctor

<http://codespeak.net/svn/user/mwh/pydoctor/trunk>
google("pydoctor mwh")

EuroPython 2006 Lightning Talk

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Origins

- On the twisted-web mailing list, back in January 2006, radix (aka Chris Armstrong aka Twisted's release manager) said:

“API docs are basically impossible to generate for mortals right now.”
- Twisted API docs had been generated with epydoc for a while, with occasional extreme pain

Extreme Pain

- Do you think this is sane code:

```
from zope.interface.interface import \
    InterfaceClass, Method
import types
types.TypeType = (types.TypeType, InterfaceClass)
```

- or this:

```
getargspec_orig = inspect.getargspec
def getargspec(func):
    ....
inspect.getargspec = getargspec
```

- Both from Twisted/admin/epyrun (“only read this file if you want your eyes to bleed”)

Design

- Works statically, using the standard library's compiler module to walk ASTs
- Analyses *systems* or whole collections of modules, rather than working module by module
- Works “outside in” or “breadth first”
- Didn't look at prior art at all...

Interesting Features

- Extracting docstrings is by far the easiest bit
- Can compute class hierarchies, knows about `zope.interface`
- Resolves local imports
- Can to some extent cope with “`import *`” statements
- Still fairly small (2500 LOC)
- Tested (py.test) (well...)
- Completely undocumented, no web site... hopefully this will change soon-ish

M.O.

- Contains two main parts:
 - Source code analyzer, dumps a pickle containing a “System”
 - HTML generator, uses said pickle
- Now in use at:

<http://twistedmatrix.com/documents/current/api/>

Other uses

- Could easily do import analysis
- Some kinds of pychecker-ish stuff (though pylint, pyflakes, ...)
- Automated refactoring...??