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# 1.2 re2 0.2.24

### 1.2.1 Available under license:

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Metadata-Version: 1.1 Name: re2 Version: 0.2.24 Summary: Python wrapper for Google's RE2 using Cython Home-page: http://github.com/axiak/pyre2/ Author: Michael Axiak, Alec Berryman, Israel Tsadok, Alex Willmer Author-email: mike@axiak.net License: New BSD License Description: ===== pyre2 .. contents::

```
Summary
   _____
   pyre2 is a Python extension that wraps
   'Google's RE2 regular expression library
   <a href="http://code.google.com/p/re2/">\_.
   This version of pyre2 is similar to the one you'd
   find at `facebook's github repository <a href="http://github.com/facebook/pyre2/">\_</a>
   except that the stated goal of this version is to be a *drop-in replacement* for
   the "`re" module.
   Backwards Compatibility
   The stated goal of this module is to be a
drop-in replacement for "re".
   My hope is that some will be able to go to the top of their module and put::
        import re2 as re
      except ImportError:
        import re
   That being said, there are features of the "re" module that this module may
   never have. For example, "RE2" does not handle lookahead assertions ("(?=...)").
   For this reason, the module will automatically fall back to the original "re" module
   if there is a regex that it cannot handle.
   However, there are times when you may want to be notified of a failover. For this reason,
   I'm adding the single function ``set_fallback_notification`` to the module.
   Thus, you can write::
      try:
        import re2 as re
      except ImportError:
        import re
     else:
    re.set_fallback_notification(re.FALLBACK_WARNING)
And in the above example, "set_fallback_notification" can handle 3 values:
   "re.FALLBACK_QUIETLY" (default), "re.FALLBACK_WARNING" (raises a warning), and
   "re.FALLBACK_EXCEPTION" (which raises an exception).
```

\*\*Note\*\*: The re2 module treats byte strings as UTF-8. This is fully backwards compatible with 7-bit ascii. However, bytes containing values larger than 0x7f are going to be treated very differently in re2 than in re. The RE library quietly ignores invalid utf8 in input strings, and throws an exception on invalid utf8 in patterns.

For example:

```
>>> re.findall(r'.', '\x80\x81\x82')
['\x80', '\x81', '\x82']
>>> re2.findall(r'.', '\x80\x81\x82')
[]
```

If you require the use of regular expressions over an arbitrary stream of bytes, then this library might not be for you.

#### Installation

\_\_\_\_\_

To install, you

must first install the prerequisites:

- \* The `re2 library from Google <a href="http://code.google.com/p/re2/">\\_</a>
- \* The Python development headers (e.g. \*sudo apt-get install python-dev\*)
- \* A build environment with ``g++`` (e.g. \*sudo apt-get install build-essential\*)

After the prerequisites are installed, you can try installing using "easy\_install":::

```
$ sudo easy_install re2
```

if you have setuptools installed (or use "pip").

If you don't want to use ``setuptools``, you can alternatively download the tarball from `pypi <a href="http://pypi.python.org/pypi/re2/">\\_.

Alternative to those, you can clone this repository and try installing it from there. To do this, run::

```
$ git clone git://github.com/axiak/pyre2.git
```

\$ cd pyre2.git

\$ sudo python setup.py install

If you want to make changes to the bindings, you must have Cython >=0.13.

Unicode Support

=========

One current issue is Unicode support. As you may know, "RE2" supports UTF8, which is certainly distinct from unicode. Right now the module will automatically encode any unicode string into utf8 for you, which is \*slow\* (it also has to decode utf8 strings back into unicode objects on every substitution or split). Therefore, you are better off using bytestrings in utf8 while working with RE2 and encoding things after everything you need done is finished.

Performance

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Performance is of course the point of this module, so it better perform well. Regular expressions vary widely in complexity, and the salient feature of "RE2" is that it behaves well asymptotically. This being said, for very simple substitutions, I've found that occasionally python's regular "re" module is actually slightly faster. However, when the "re" module gets slow, it gets \*really\* slow, while this module buzzes along.

In the below example, I'm running the data against 8MB of text from the collosal Wikipedia XML file. I'm running them multiple times, being careful to use the ``timeit`` module.

To see more details, please see the `performance script

<a href="http://github.com/axiak/pyre2/tree/master/tests/p">http://github.com/axiak/pyre2/tree/master/tests/p</a>	-		·	+
Test   Description	# total runs ``re`` time(s) ``re2`` time(s) %			
Hermitian   Herm	zA-Z0-9]*)://([^ /]+)(/[^ ]*)? ([^ @]	+)@([^ @]	+)' 2	19.961
Replace WikiLinks This test replaces links or	of the form [[Obama Barack_Obama]			+
Remove WikiLinks  This test splits the data  8.80%    2.252    62.43%	by the <page> tag.</page>	100	15.983	1.406
Feel free to add more speed tests to the botto	+			•
Current Status =========				
pyre2 has only received basic testing. Please and let me know if you run into any issues!	use it			
Contact ======				
You can file bug reports on GitHub, or conta 'Mike Axiak contact page <a href="http://mike.axial">http://mike.axial</a>				

#### Tests

=====

If you would like to help, one thing that would be very useful is writing comprehensive tests for this. It's actually really easy:

- \* Come up with regular expression problems using the regular python 're' module.
- \* Write a session in python traceback format `Example

<a href="http://github.com/axiak/pyre2/blob/master/tests/search.txt">http://github.com/axiak/pyre2/blob/master/tests/search.txt</a>.

- \* Replace your ``import re`` with ``import re2 as re``.
- \* Save it as a .txt file in the tests directory. You can comment on it however you like and indent the code with 4 spaces.

### Missing Features

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Currently the features missing are:

\* If you use substitution methods without a callback, a non 0/1 maxsplit argument is not supported.

#### Credits

======

Though I ripped out the code, I'd like to thank David Reiss and Facebook for the initial inspiration. Plus, I got to gut this readme file!

Moreover, this library would of course not be possible if not for the immense work of the team at RE2 and the few people who work on Cython.

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### Found in path(s):

\*/re2-0-2-24-linux-x86-64-tar-gz/usr/local/lib/python 3.6/dist-packages/re2-0.2.24.egg-info

# 1.3 libunwind 1.8.1

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# 1.4 libdwarf 0.9.1

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David Anderson is at libdwarf-list -at- linuxmail =dot= org

280 Bella Vista Drive Hillsborough, California 94010 USA.

David Anderson: December 2006

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<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
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libdwarf.h

libdwarfp.h

dwarf.h

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13 June 2021 updated to match the new file structure.

# 1.5 devmem2 1.0

### 1.5.1 Available under license:

No license file was found, but licenses were detected in source scan.

```
* devmem2.c: Simple program to read/write from/to any location in memory.
* Copyright (C) 2000, Jan-Derk Bakker (jdb@lartmaker.nl)
* This software has been developed for the LART computing board
* (http://www.lart.tudelft.nl/). The development has been sponsored by
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* and Ubiquitous Communications (http://www.ubicom.tudelft.nl/)
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* Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA
*/
Found in path(s):
```

\* /devmem2-1-0-r7-tar-bz2/devmem2-1.0-r7/devmem2.c

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