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The basic library functions are written in C and are freestanding. Also included in the distribution is a set of C++ wrapper functions.

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Written by: Philip Hazel

Email local part: ph10

Email domain: cam.ac.uk

University of Cambridge Computing Service,
Cambridge, England.

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1.6 bzip2 1.0.8

1.7 libdaemon 0.14

1.7.1 Available under license :

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1.8 jansson 2.11

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1.9 ndg-httpsclient 0.5.1

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1.10 libusb-compat 0.1.7

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The following individuals contributed in part to the Network Time
Protocol Distribution

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1. [1]Takao Abe <takao_abe@xurb.jp> Clock driver for JJY receivers
2. [2]Mark Andrews <mark_andrews@isc.org> Leitch atomic clock controller
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 6. [7]Karl Berry <karl@owl.HQ.ileaf.com> syslog to file option
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 9. [10]Piete Brooks <Piete.Brooks@cl.cam.ac.uk> MSF clock driver, Trimble PARSE support
 10. [11]Nelson B Bolyard <nelson@bolyard.me> update and complete broadcast and crypto features
- in sntp
11. [12]Jean-Francois Boudreault <Jean-Francois.Boudreault@viagenie.qc.ca> IPv6 support
 12. [13]Reg Clemens <reg@dwf.com> Oncore driver (Current maintainer)
 13. [14]Steve Clift <clift@ml.csiro.au> OMEGA clock driver
 14. [15]Casey Crellin <casey@csc.co.za> vxWorks (Tornado) port and help with target configuration
 15. [16]Sven Dietrich <sven_dietrich@trimble.com> Palisade reference clock driver, NT adj. residuals, integrated Greg's Winnt port.
 16. [17]John A. Dundas III <dundas@salt.jpl.nasa.gov> Apple A/UX port
 17. [18]Torsten Duwe <duwe@immd4.informatik.uni-erlangen.de> Linux port
 18. [19]Dennis Ferguson <dennis@mrbill.canet.ca> foundation code for NTP Version 2 as specified in RFC-1119
 19. [20]John Hay <jhay@icomtek.csir.co.za> IPv6 support and testing
 20. [21]Dave Hart <davehart@davehart.com> General maintenance, Windows port interpolation rewrite
 21. [22]Claas Hilbrecht <neoclock4x@linum.com> NeoClock4X clock driver
 22. [23]Glenn Hollinger <glenn@herald.usask.ca> GOES clock driver
 23. [24]Mike Iglesias <iglesias@uci.edu> DEC Alpha port
 24. [25]Jim Jagielski <jim@jagubox.gsfc.nasa.gov> A/UX port
 25. [26]Jeff Johnson <jbj@chatham.usdesign.com> massive prototyping overhaul
 26. [27]Hans Lambermont <Hans.Lambermont@nl.origin-it.com> or [28]<H.Lambermont@chello.nl> ntpsweep
 27. [29]Poul-Henning Kamp <phk@FreeBSD.ORG> Oncore driver (Original author)
 28. [30]Frank Kardel [31]<kardel (at) ntp (dot) org> PARSE <GENERIC> (driver 14 reference clocks), STREAMS modules for PARSE, support scripts, syslog cleanup, dynamic interface handling
 29. [32]Johannes Maximilian Kuehn <kuehn@ntp.org> Rewrote sntp to comply with NTPv4 specification, ntpq saveconfig
 30. [33]William L. Jones <jones@hermes.chpc.utexas.edu> RS/6000 AIX modifications, HPUX modifications
 31. [34]Dave Katz <dkatz@cisco.com> RS/6000 AIX port
 32. [35]Craig

- Leres <leres@ee.lbl.gov> 4.BSD port, ppsclock, Magnavox
GPS clock driver
33. [36]George Lindholm <lindholm@ucs.ubc.ca> SunOS 5.1 port
 34. [37]Louis A. Mamakos <louie@ni.umd.edu> MD5-based authentication
 35. [38]Lars H. Mathiesen <thorinn@diku.dk> adaptation of foundation code for Version 3 as specified in RFC-1305
 36. [39]Danny Mayer <mayer@ntp.org>Network I/O, Windows Port, Code Maintenance
 37. [40]David L. Mills <mills@udel.edu> Version 4 foundation, precision kernel; clock drivers: 1, 3, 4, 6, 7, 11, 13, 18, 19, 22, 36
 38. [41]Wolfgang Moeller <moeller@gwdgv1.dnet.gwdg.de> VMS port
 39. [42]Jeffrey Mogul <mogul@pa.dec.com> ntptrace utility
 40. [43]Tom Moore <tmooore@fiemel.daytonoh.ncr.com> i386 svr4 port
 41. [44]Kamal A Mostafa <kamal@whence.com> SCO OpenServer port
 42. [45]Derek Mulcahy <derek@toybox.demon.co.uk> and [46]Damon Hart-Davis <d@hd.org> ARCRON MSF clock driver
 43. [47]Rob Neal <neal@ntp.org> Bancomm refclock and config/parse code maintenance
 44. [48]Rainer Pruy <Rainer.Pruy@informatik.uni-erlangen.de> monitoring/trap scripts, statistics file handling
 45. [49]Dirce Richards <dirce@zk3.dec.com> Digital UNIX V4.0 port
 46. [50]Wilfredo Sanchez <wsanchez@apple.com> added support for NetInfo
 47. [51]Nick Sayer <mrapple@quack.kfu.com> SunOS streams modules
 48. [52]Jack Sasportas <jack@innovativeinternet.com> Saved a Lot of space on the stuff in the html/pic/ subdirectory
 49. [53]Ray Schnitzler <schnitz@unipress.com> Unixware1 port
 50. [54]Michael Shields <shields@tembel.org> USNO clock driver
 51. [55]Jeff Steinman <jss@pebbles.jpl.nasa.gov> Datum PTS clock driver
 52. [56]Harlan Stenn <harlan@pfcs.com> GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)
 53. [57]Kenneth Stone <ken@sdd.hp.com> HP-UX port
 54. [58]Ajit Thyagarajan <ajit@ee.udel.edu>IP multicast/anycast support
 55. [59]Tomoaki TSURUOKA <tsuruoka@nc.fukuoka-u.ac.jp>TRAK clock driver
 56. [60]Brian Utterback <brian.utterback@oracle.com> General codebase, Solaris issues
 57. [61]Loganaden Velvindron <loganaden@gmail.com> Sandboxing (libseccomp) support
 58. [62]Paul A Vixie <vixie@vix.com> TrueTime GPS driver, generic TrueTime clock driver
 59. [63]Ulrich Windl <Ulrich.Windl@rz.uni-regensburg.de> corrected and validated HTML documents according to the HTML DTD

References

1. mailto:%20takao_abe@xurb.jp

2. [mailto:%20mark_andrews@isc.org](mailto:mark_andrews@isc.org)
3. [mailto:%20altmeier@atsoft.de](mailto:altmeier@atsoft.de)
4. [mailto:%20vbais@mailman1.intel.co](mailto:vbais@mailman1.intel.co)
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1.12 popt 1.18

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1.13 bash 5.0.18

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*/
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Found in path(s):

```
* /opt/cola/permits/1102738801_1610534739.81/0/multipart-parser-c-master-3-zip/multipart-parser-c-master/multipart_parser.c
```

* /opt/cola/permits/1102738801_1610534739.81/0/multipart-parser-c-master-3-zip/multipart-parser-c-master/multipart_parser.h

1.15 headline 8.1

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```

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1.16 pyasn1 0.4.8

1.16.1 Available under license :

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Metadata-Version: 1.2

Name: pyasn1

Version: 0.4.8

Summary: ASN.1 types and codecs

Home-page: <https://github.com/etingof/pyasn1>

Author: Ilya Etingof

Author-email: etingof@gmail.com

Maintainer: Ilya Etingof etingof@gmail.com

License: BSD

Description: Pure-Python implementation of ASN.1 types and DER/BER/CER codecs (X.208)

Platform: any

Classifier: Development Status :: 5 - Production/Stable

Classifier: Environment :: Console

Classifier: Intended Audience :: Developers

Classifier: Intended Audience :: Education

Classifier: Intended Audience :: Information Technology

Classifier: Intended Audience :: System Administrators

Classifier: Intended Audience :: Telecommunications Industry

Classifier: License :: OSI Approved :: BSD License

Classifier: Natural Language :: English

Classifier: Operating System :: OS Independent

Classifier: Programming Language :: Python :: 2

Classifier: Programming Language :: Python :: 2.4

Classifier:

Programming Language :: Python :: 2.5
Classifier: Programming Language :: Python :: 2.6
Classifier: Programming Language :: Python :: 2.7
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Classifier: Programming Language :: Python :: 3.5
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Classifier: Topic :: Software Development :: Libraries :: Python Modules

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*
/opt/cola/permits/1110812511_1607462013.57/0/pyasn1-0-4-8-tar-gz/pyasn1-0.4.8/pyasn1/codec/ber/encoder.py
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* /opt/cola/permits/1110812511_1607462013.57/0/pyasn1-0-4-8-tar-gz/pyasn1-0.4.8/pyasn1/type/namedval.py
* /opt/cola/permits/1110812511_1607462013.57/0/pyasn1-0-4-8-tar-gz/pyasn1-0.4.8/pyasn1/type/constraint.py
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* /opt/cola/permits/1110812511_1607462013.57/0/pyasn1-0-4-8-tar-gz/pyasn1-0.4.8/pyasn1/codec/ber/decoder.py
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* /opt/cola/permits/1110812511_1607462013.57/0/pyasn1-0-4-8-tar-gz/pyasn1-0.4.8/tests/type/__main__.py

```

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* /opt/cola/permits/1110812511_1607462013.57/0/pyasn1-0-4-8-tar-gz/pyasn1-0.4.8/pyasn1/type/univ.py
*
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0.4.8/tests/codec/native/test_encoder.py

```


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ASN.1 library for Python

[[PyPI](https://img.shields.io/pypi/v/pyasn1.svg?maxAge=2592000)](https://pypi.org/project/pyasn1)
[[Python Versions](https://img.shields.io/pypi/pyversions/pyasn1.svg)](https://pypi.org/project/pyasn1/)
[[Build status](https://travis-ci.org/etingof/pyasn1.svg?branch=master)](https://secure.travis-ci.org/etingof/pyasn1)
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[[GitHub license](https://img.shields.io/badge/license-BSD-blue.svg)](https://raw.githubusercontent.com/etingof/pyasn1/master/LICENSE.txt)

This is a free and open source implementation of ASN.1 types and codecs as a Python package. It has been first written to support particular protocol (SNMP) but then generalized to be suitable for a wide range of protocols based on

[ASN.1 specification](https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-X.208-198811-W!!PDF-E&type=items).

Features

*

- Generic implementation of ASN.1 types (X.208)
- * Standards compliant BER/CER/DER codecs
- * Dumps/loads ASN.1 structures from Python types
- * 100% Python, works with Python 2.4 up to Python 3.7
- * MT-safe
- * Contributed ASN.1 compiler [Asn1ate](<https://github.com/kimgr/asn1ate>)

Why using pyasn1

ASN.1 solves the data serialisation problem. This solution was designed long ago by the wise Ancients. Back then, they did not have the luxury of wasting bits. That is why ASN.1 is designed to serialise data structures of unbounded complexity into something compact and efficient when it comes to processing the data.

That probably explains why many network protocols and file formats still rely on the 30+ years old technology. Including a number of high-profile Internet protocols and file formats.

Quite a number of books cover the topic of ASN.1.
[Communication between heterogeneous systems](<http://www.oss.com/asn1/dubuisson.html>)
by
Olivier Dubuisson is one of those high quality books freely available on the Internet.

The pyasn1 package is designed to help Python programmers tackling network protocols and file formats at the comfort of their Python prompt. The tool struggles to capture all aspects of a rather complicated ASN.1 system and to represent it on the Python terms.

How to use pyasn1

With pyasn1 you can build Python objects from ASN.1 data structures. For example, the following ASN.1 data structure:

```
```bash
Record ::= SEQUENCE {
 id INTEGER,
 room [0] INTEGER OPTIONAL,
 house [1] INTEGER DEFAULT 0
}
```

```
}
...

```

Could be expressed in pyasn1 like this:

```
```python  
class Record(Sequence):  
    componentType = NamedTypes(  
        NamedType('id', Integer()),  
        OptionalNamedType(  
            'room', Integer()).subtype(  
                implicitTag=Tag(tagClassContext, tagFormatSimple, 0)  
            )  
        ),  
        DefaultedNamedType(  
            'house',  
            Integer(0).subtype(  
                implicitTag=Tag(tagClassContext, tagFormatSimple, 1)  
            )  
        )  
    )  
...  

```

It is in the spirit of ASN.1 to take abstract data description and turn it into a programming language specific form. Once you have your ASN.1 data structure expressed in Python, you can use it along the lines of similar Python type (e.g. ASN.1 `SET` is similar to Python `dict`, `SET OF` to `list`):

```
```python  
>>> record = Record()
>>> record['id'] = 123
>>> record['room'] = 321
>>> str(record)
Record:
id=123
room=321
>>>
...

```

Part of the power of ASN.1 comes from its serialisation features. You can serialise your data structure and send it over the network.

```
```python  
>>> from pyasn1.codec.der.encoder import encode  
>>> substrate = encode(record)  
>>> hexdump(substrate)  
0000: 30 07 02 01 7B 80 02 01 41  

```

```
...
```

Conversely, you can turn serialised ASN.1 content, as received from network or read from a file, into a Python object which you can introspect, modify, encode and send back.

```
```python
>>> from pyasn1.codec.der.decoder import decode
>>> received_record, rest_of_substrate = decode(substrate, asn1Spec=Record())
>>>
>>> for field in received_record:
>>> print('{} is {}'.format(field, received_record[field]))
id is 123
room is 321
house is 0
>>>
>>> record == received_record
True
>>> received_record.update(room=123)
>>> substrate = encode(received_record)
>>> hexdump(substrate)
00000: 30 06 02 01 7B 80 01 7B
...

```

The pyasn1 classes struggle to emulate their Python prototypes (e.g. int, list, dict etc.). But ASN.1 types exhibit more complicated behaviour. To make life easier for a Pythonista, they can turn their pyasn1 classes into Python built-ins:

```
```python
>>> from pyasn1.codec.native.encoder import encode
>>> encode(record)
{'id': 123, 'room': 321, 'house': 0}
...

```

Or vice-versa -- you can initialize an ASN.1 structure from a tree of Python objects:

```
```python
>>> from pyasn1.codec.native.decoder import decode
>>> record = decode({'id':
123, 'room': 321, 'house': 0}, asn1Spec=Record())
>>> str(record)
Record:
id=123
room=321
>>>

```

...

With ASN.1 design, serialisation codecs are decoupled from data objects, so you could turn every single ASN.1 object into many different serialised forms. As of this moment, pyasn1 supports BER, DER, CER and Python built-ins codecs. The extremely compact PER encoding is expected to be introduced in the upcoming pyasn1 release.

More information on pyasn1 APIs can be found in the [documentation](http://snmplabs.com/pyasn1/), compiled ASN.1 modules for different protocols and file formats could be found in the pyasn1-modules [repo](https://github.com/etingof/pyasn1-modules).

How to get pyasn1

-----

The pyasn1 package is distributed under terms and conditions of 2-clause BSD [license](http://snmplabs.com/pyasn1/license.html). Source code is freely available as a GitHub [repo](https://github.com/etingof/pyasn1).

You could `pip install pyasn1` or download it from [PyPI](https://pypi.org/project/pyasn1).

If

something does not work as expected, [open an issue](https://github.com/etingof/pyasn1/issues) at GitHub or post your question [on Stack Overflow](https://stackoverflow.com/questions/ask) or try browsing pyasn1 [mailing list archives](https://sourceforge.net/p/pyasn1/mailman/pyasn1-users/).

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## ASN.1 library for Python

=====

```
.. toctree::
 :maxdepth: 1
```

### Abstract Syntax Notation One (ASN.1

[http://en.wikipedia.org/wiki/Abstract\\_Syntax\\_Notation\\_1](http://en.wikipedia.org/wiki/Abstract_Syntax_Notation_1)) is a technology for exchanging structured data in a universally understood, hardware agnostic way. Many industrial, security and telephony applications heavily rely on ASN.1.

The `pyasn1` <https://pypi.org/project/pyasn1/> library implements ASN.1 support in pure-Python.

### What is ASN.1

-----

ASN.1 is a large, arguably over-engineered and extremely old data modelling and serialisation tool. It is probably among the first serialisation protocols in the history of computer science and technology.

ASN.1 started its life over 30 years ago as a serialisation mechanism for the first electronic mail (known as X.400). Later on it was split off the e-mail application and become a stand-alone tech still being actively supported by its designers and widely used in industry and technology.

Since then ASN.1 is sort of haunted by its relations with the OSI model -- the first, unsuccessful, version of the Internet. You can read many interesting [discussions https://news.ycombinator.com/item?id=8871453](https://news.ycombinator.com/item?id=8871453) on that topic.

In the following years, generations of software engineers tackled the serialisation problem many times. We can see that in Google's `ProtoBuffers` <https://developers.google.com/protocol-buffers/> or `FlatBuffers` <https://google.github.io/flatbuffers/>, for example. Interestingly, many new takes on binary protocol design do not depart far from ASN.1 from technical perspective. It's more of a matter of striking a balance between processing overhead, wire format overhead and human readability.

Looking at what ASN.1 has to offer, it has three loosely coupled parts:

- \* Data types: the standard introduces a collection of basic data types (integers, bits, strings, arrays and records) that can be used for describing arbitrarily complex, nested data structures.
- \* Serialisation protocols: the above data structures could be converted into a

series of octets for storage or transmission over the wire as well as recovered back into their structured form. The system is fully agnostic to hardware architectures differences.

\* Schema language: ASN.1 data structures could be described in terms of a schema language for ASN.1 compiler to turn it into platform-specific implementation.

#### ASN.1 applications

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Being an old and generally successful standard, ASN.1 is widely adopted for many uses. To give you an example, these technologies use ASN.1 for their data exchange needs:

- \* Signaling standards for the public switched telephone network (SS7 family)
- \* Network management standards (SNMP, CMIP)
- \* Directory standards (X.500 family, LDAP)
- \* Public Key Infrastructure standards (X.509, etc.)
- \* PBX control (CSTA)
- \* IP-based Videoconferencing (H.323 family)
- \* Biometrics (BIP, CBEFF, ACBio)
- \* Intelligent transportation (SAE J2735)
- \* Cellular telephony (GSM, GPRS/EDGE, UMTS, LTE)

#### ASN.1 gotchas

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Apparently, ASN.1 is hard to implement properly. Quality open-source ASN.1 tools are rare, but ad-hoc implementations are numerous. Judging from the ``statistics <http://cve.mitre.org/cgi-bin/cvekey.cgi?keyword=ASN.1>`` on discovered security vulnerabilities, many people have implemented ASN.1 parsers and oftentimes fell victim to its edge cases.

On the bright side, ASN.1 has been around for a long time, it is well understood and security reviewed.

#### Documentation

-----

```
.. toctree::
 :maxdepth: 2
```

```
/pyasn1/contents
```

#### Use case

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```
.. toctree::
 :maxdepth: 2
```

/example-use-case

## Download & Install

-----

```
.. toctree::
 :maxdepth: 2
```

/download

## Changes

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All changes and release history is maintained in changelog. There you could also download the latest unreleased pyasn1 tarball containing the latest fixes and improvements.

```
..
toctree::
 :maxdepth: 1
```

/changelog

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-----

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## Getting help

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Please, file your `issues` <<https://github.com/etingof/pyasn1/issues>>`\_` and `PRs` <<https://github.com/etingof/pyasn1/pulls>>`\_` at GitHub. Alternatively, you could ask for help at `Stack Overflow` <<http://stackoverflow.com/questions/tagged/pyasn1>>`\_` or search `pyasn1-users` <<https://lists.sourceforge.net/lists/listinfo/pyasn1-users>>`\_` mailing list archive.



## Books on ASN.1

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The pyasn1 implementation is largely based on reading up the following awesome books:

\* `ASN.1 - Communication between heterogeneous systems <<http://www.oss.com/asn1/dubuisson.html>>` \_ by Olivier Dubuisson

\* `ASN.1 Complete <<http://www.oss.com/asn1/resources/books-whitepapers-pubs/larmouth-asn1-book.pdf>>` \_ by Prof John Larmouth

Here you can get the official standards which is hard to read:

\* `ITU standards

<<http://www.itu.int/ITU-T/studygroups/com17/languages/X.680-X.693-0207w.zip>>` \_

On the other end of the readability spectrum, here is a quick and sweet write up:

\* `A Layman's Guide to a Subset of ASN.1, BER, and DER <<ftp://ftp.rsasecurity.com/pub/pkcs/ascii/layman.asc>>` \_ by Burton S. Kaliski

If you are working with ASN.1, we'd highly recommend reading a proper book on the subject.

Found in path(s):

\* /opt/cola/permits/1110812511\_1607462013.57/0/pyasn1-0-4-8-tar-gz/pyasn1-0.4.8/docs/source/contents.rst

# 1.17 libdnet 1.12

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## 1.18 ptyprocess 0.7.0

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## 1.19 bridgeutils 1.7.1

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```
PLY (Python Lex-Yacc) Version 3.11
```

```
[![Build Status](https://travis-ci.org/dabeaz/ply.svg?branch=master)](https://travis-ci.org/dabeaz/ply)
```

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Introduction

=====



PLY is a 100% Python implementation of the common parsing tools lex and yacc. Here are a few highlights:

- PLY is very closely modeled after traditional lex/yacc. If you know how to use these tools in C, you will find PLY to be similar.
- PLY provides *very* extensive error reporting and diagnostic information to assist in parser construction. The original implementation was developed for instructional purposes. As a result, the system tries to identify the most common types of errors made by novice users.
- PLY provides full support for empty productions, error recovery, precedence specifiers, and moderately ambiguous grammars.
- Parsing is based on LR-parsing which is fast, memory efficient, better suited to large grammars, and which has a number of nice properties when dealing with syntax errors and other parsing problems. Currently, PLY builds its parsing tables using the LALR(1) algorithm used in yacc.
- PLY uses Python introspection features to build lexers and parsers. This greatly simplifies the task of parser construction since it reduces the number of files and eliminates the need to run a separate lex/yacc tool before running your program.
- PLY can be used to build parsers for "real" programming languages. Although it is not ultra-fast due to its Python implementation, PLY can be used to parse grammars consisting of several hundred rules (as might be found for a language like C). The lexer and LR parser are also reasonably efficient when parsing typically sized programs. People have used PLY to build parsers for C, C++, ADA, and other real programming languages.

#### How to Use

=====

PLY consists of two files : lex.py and yacc.py. These are contained within the 'ply' directory which may also be used as a Python package. To use PLY, simply copy the 'ply' directory to your project and import lex and yacc from the associated 'ply' package. For example:

```
import ply.lex as lex
import ply.yacc as yacc
```

Alternatively, you can copy just the files lex.py and yacc.py individually and use them as modules. For example:

```
import lex
import yacc
```

The file setup.py can be used to install ply using distutils.

The file doc/ply.html contains complete documentation on how to use the system.

The example directory contains several different examples including a PLY specification for ANSI C as given in K&R 2nd Ed.

A simple example is found at the end of this document

#### Requirements

=====

PLY requires the use of Python 2.6 or greater. However, you should use the latest Python release if possible. It should work on just about any platform. PLY has been tested with both CPython and Jython. It also seems to work with IronPython.

#### Resources

=====

More information about PLY can be obtained on the PLY webpage at:

<http://www.dabeaz.com/ply>

For a detailed overview of parsing theory, consult the excellent book "Compilers : Principles, Techniques, and Tools" by Aho, Sethi, and Ullman. The topics found in "Lex & Yacc" by Levine, Mason, and Brown may also be useful.

The GitHub page for PLY can be found at:

<https://github.com/dabeaz/ply>

An old and relatively inactive discussion group for PLY is found at:

<http://groups.google.com/group/ply-hack>

#### Acknowledgments

=====

A special thanks is in order for all of the students in CS326 who suffered through about 25 different versions of these tools :-).

The CHANGES file acknowledges those who have contributed patches.

Elias Ioup did the first implementation of LALR(1) parsing in PLY-1.x. Andrew Waters and Markus Schoepflin were instrumental in reporting bugs and testing a revised LALR(1) implementation for PLY-2.0.

#### Special Note for PLY-3.0

=====

PLY-3.0 the first PLY release to support Python 3. However, backwards compatibility with Python 2.6 is still preserved. PLY provides dual Python 2/3 compatibility by restricting its implementation to a common subset of basic language features. You should not convert PLY using 2to3--it is not necessary and may in fact break the implementation.

#### Example

=====

Here is a simple example showing a PLY implementation of a calculator with variables.

```

calc.py
#
A simple calculator with variables.

tokens = (
 'NAME','NUMBER',
 'PLUS','MINUS','TIMES','DIVIDE','EQUALS',
 'LPAREN','RPAREN',
)

Tokens

t_PLUS = r'\+'
t_MINUS = r'\-'
t_TIMES = r'*'
t_DIVIDE = r'\/'
t_EQUALS = r'='
t_LPAREN = r'\('
t_RPAREN = r'\)'
t_NAME = r'[a-zA-Z_][a-zA-Z0-9_]*'

def t_NUMBER(t):
 r'\d+'
 t.value = int(t.value)
 return t
```

```

Ignored characters
t_ignore = " \t"

def t_newline(t):
 r'\n+'
 t.lexer.lineno += t.value.count("\n")

def t_error(t):
 print("Illegal character '%s'" % t.value[0])
 t.lexer.skip(1)

Build the lexer
import ply.lex as lex
lex.lex()

Precedence
rules for the arithmetic operators
precedence = (
 ('left','PLUS','MINUS'),
 ('left','TIMES','DIVIDE'),
 ('right','UMINUS'),
)

dictionary of names (for storing variables)
names = { }

def p_statement_assign(p):
 'statement : NAME EQUALS expression'
 names[p[1]] = p[3]

def p_statement_expr(p):
 'statement : expression'
 print(p[1])

def p_expression_binop(p):
 """expression : expression PLUS expression
 | expression MINUS expression
 | expression TIMES expression
 | expression DIVIDE expression"""
 if p[2] == '+': p[0] = p[1] + p[3]
 elif p[2] == '-': p[0] = p[1] - p[3]
 elif p[2] == '*': p[0] = p[1] * p[3]
 elif p[2] == '/': p[0] = p[1] / p[3]

def p_expression_uminus(p):
 'expression : MINUS expression %prec UMINUS'
 p[0] = -p[2]

```

```

def p_expression_group(p):
 'expression : LPAREN
expression RPAREN'
 p[0] = p[2]

def p_expression_number(p):
 'expression : NUMBER'
 p[0] = p[1]

def p_expression_name(p):
 'expression : NAME'
 try:
 p[0] = names[p[1]]
 except LookupError:
 print("Undefined name '%s'" % p[1])
 p[0] = 0

def p_error(p):
 print("Syntax error at '%s'" % p.value)

import ply.yacc as yacc
yacc.yacc()

while True:
 try:
 s = raw_input('calc > ') # use input() on Python 3
 except EOFError:
 break
 yacc.parse(s)

```

## Bug Reports and Patches

=====

My goal with PLY is to simply have a decent lex/yacc implementation for Python. As a general rule, I don't spend huge amounts of time working on it unless I receive very specific bug reports and/or patches to fix problems. I also try to incorporate submitted feature requests and enhancements into each new version. Please visit the PLY github page

at <https://github.com/dabeaz/ply> to submit issues and pull requests. To contact me about bugs and/or new features, please send email to [dave@dabeaz.com](mailto:dave@dabeaz.com).

-- Dave

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## 1.22 pexpect 4.8.0

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## 1.23 mpclib 1.2.1

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## THE BASIC LIBRARY FUNCTIONS

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Written by: Philip Hazel  
Email local part: Philip.Hazel  
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# 1.28 procps 3.3.17

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# 1.29 tdb 1.43

## 1.29.1 Available under license :

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Version 3, 29 June 2007

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# 1.30 luajit 2.1.0.beta3

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## 1.33 ncurses 6.3

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# 1.37 safeclib 4.0.0

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## 1.38 json-c 0.16

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## 1.39 xdelta 3.1.0

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## 1.42 gawk 5.1.1

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it. And you must show them these terms so they know their rights.

Our method of protecting your rights has two steps: (1) copyright  
the library, and (2) offer you this license which gives you legal

permission to copy, distribute and/or modify the library.

Also, for each distributor's protection, we want to make certain that everyone understands that there is no warranty for this free library. If the library is modified by someone else and passed on, we want its recipients to know that what they have is not the original version, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

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0. This License Agreement applies to any software library which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must

be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based



on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition,

mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or

linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding

machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

- b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library

facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

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## END OF TERMS AND CONDITIONS

### Appendix: How to Apply These Terms to Your New Libraries

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To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>  
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Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary.

Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990  
Ty Coon, President of Vice

That's all there is to it!

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Version 3, 29 June 2007

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For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.



The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS

### 0. Definitions.

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"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

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A "covered work" means either the unmodified Program or a work based on the Program.

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### 1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

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A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

#### 6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License,

in one of these ways:

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as

long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source

as a System Library, need not be included in conveying the object code work.

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## 1.43 libmnl 1.0.5

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## 1.44 python-requests 2.28.1

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes

2.2 and above  
2.1.1 2001-now PSF yes

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Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#  
This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:  
<http://mxr.mozilla.org/mozilla/source/security/nss/lib/ckfw/builtins/certdata.txt?raw=1#>  
It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php\_curl, or with an Apache+mod\_ssl webserver for SSL client authentication.  
Just configure this file as the SSLCACertificateFile.#

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@(#) \$RCSfile: certdata.txt,v \$

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### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3				
2.1.2	2002	PSF	yes	
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes
3.0	2.6	2008	PSF	yes
3.0.1	3.0	2009	PSF	yes
3.1	3.0.1	2009	PSF	yes
3.1.1	3.1	2009	PSF	yes

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### A. HISTORY OF THE SOFTWARE

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to

BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above				
2.1.1	2001-now	PSF		yes

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- \* @author Paulo Barreto <paulo.barreto@terra.com.br>
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## 1.56 python-setuptools 63.2.0

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```
<one line to give the program's name and a brief idea of what it does.>
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```

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```
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```

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```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
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```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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The End

## 1.58 glib 2.72.3

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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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## 1.61 gdbm 1.23

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## 1.62 elfutils 0.187

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```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

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be called something other than ``show w'` and ``show c'`; they could even be  
mouse-clicks or menu items--whatever suits your program.

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school, if any, to sign a "copyright disclaimer" for the program, if  
necessary. Here is a sample; alter the names:

```
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`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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```
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=====

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## 1.64 python-certifi 2022.09.14

### 1.64.1 Available under license :

This package contains a modified version of ca-bundle.crt:

ca-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#

This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:

<https://hg.mozilla.org/mozilla-central/file/tip/security/nss/lib/ckfw/builtins/certdata.txt>

It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php\_curl, or with an Apache+mod\_ssl webserver for SSL client authentication.

Just configure this file as the SSLCACertificateFile.#

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@(#) \$RCSfile: certdata.txt,v

\$ \$Revision: 1.80 \$ \$Date: 2011/11/03 15:11:58 \$

## 1.65 idna 15.0.0

### 1.65.1 Available under license :

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## 1.66 safestring 4.1.3

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```
/*
```

```
SafeSting length(), trim()
```

by Matthew Ford

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[www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1439711747_1665547780.0078397/0/safestring-4-1-24-zip/SafeString-4.1.24/examples/SafeString_Tests/SafeStringLengthTrim/SafeStringLengthTrim.ino
```

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```
/* SafeStringInClasses_1.ino
```

```
Example of using SafeString for Class char[]s
```

by Matthew Ford

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or from [www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html](http://www.forward.com.au/pfod/ArduinoProgramming/SafeString/index.html)

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/\*

SafeString removeFrom(), removeBefore(), remove(), removeLast(), keepLast()

Examples of SafeString remove

by Matthew Ford

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SafeString from char[] constructor

Examples of how to create SafeStrings from an existing char[]

also see the SafeString\_ConstructorAndDebugging, SafeStringFromCharPtr and SafeStringFromCharPtrWithSize examples

by Matthew Ford

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SafeString startsWith(), startsWithIgnoreCase(), endsWithCharFrom() and endsWith()

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SafeString to Number conversion

Examples of SafeString to Number conversions and comparing these to the results from String methods

by Matthew Ford

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Test Errors for Assignment to SafeStrings using the = operator

by Matthew Ford

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Comparing SafeStrings

Examples of how to compare SafeStrings using the comparison operators

by Matthew Ford

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/\* SafeStringWithArraysOfCstrings.ino

Example of using SafeString for working with char[][xx]

by Matthew Ford

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SafeString substring()

Examples of SafeString substring

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SafeString replace()

Examples of SafeString replace for chars and strings

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/\*

Appending to SafeStrings using the += operator and concat()  
Examples of how to append different data types to SafeStrings  
Also has examples of using hasError() method

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WString.h - String library for Wiring & Arduino  
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sfStream.ino

SafeStringStream Unit test  
Example of using SafeStringStream

by Matthew Ford  
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SafeString readUntil, non-blocking until delimiter found  
Example of how to use the non-blocking readUntil() method to parse a CSV line

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SSring indexOf() and lastIndexOf()

by Matthew Ford

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SafeString charAt() and setCharAt()

Examples of how to get and set characters of a SafeString

by Matthew Ford

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SafeStringReader\_flushInput.ino

This example flushes any initial input and also starts flushing if "flush" is found in the text stream

by Matthew Ford

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SafeString constructors and assignments

Examples of how to create SafeStrings and how to assign SafeStrings from other data types

also see the SafeStringFromArray, SafeStringFromCharPtr and SafeStringFromCharPtrWithSize examples

by Matthew Ford

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4.1.24/examples/SafeString\_Tests/SafeString\_ConstructorAndDebugging/SafeString\_ConstructorAndDebugging.in

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/\*

SafeString from char\* with specified size constructor

Examples of how to create SafeStrings from an existing pointer to a char[]

also see the SafeString\_ConstructorAndDebugging, SafeStringFromArray and SafeStringFromCharPtr examples

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4.1.24/examples/SafeString\_Tests/SafeStringFromArray/SafeStringFromArray.ino

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Fixed 9 Formatting of double/float/long/ing

by Matthew Ford

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Tokenizing SafeStrings and converting to numbers

Examples of how to use the nextToken() and toLong() and toDouble() to parse a CSV line

by Matthew Ford

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SafeStringReader\_GPS.ino

This example reads GPS data from a SafeStringStream continuously using a SafeStringReader

by Matthew Ford

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Tokenizing SafeStrings and converting to numbers

Examples of how to use the token and toLong() and toDouble() to parse a CSV line

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SafeString from char\* constructor

Examples of how to create SafeStrings from an existing pointer to a char[]

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by Matthew Ford

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Prefixing to SafeStrings using the -= operator and prefix()

Examples of how to prefix different data types to SafeStrings

by Matthew Ford

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/\*

## Blink

Turns an led on for one second, then off for one second, repeatedly.

Most Arduinos have an on-board led you can control. On the UNO, MEGA and ZERO it is attached to digital pin 13, on MKR1000 on pin 6. led is set to the correct led pin independent of which board is used.

If you want to know what pin the on-board led is connected to on your Arduino model, check the Technical Specs of your board at:

<https://www.arduino.cc/en/Main/Products>

modified 8 May 2014

by Scott Fitzgerald

modified 2 Sep 2016

by Arturo Guadalupi

modified 8 Sep 2016

by Colby Newman

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<http://www.arduino.cc/en/Tutorial/Blink>

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SafeString.cpp V2.0.0 static memory SafeString library modified by  
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extensively modified from

WString.cpp - SafeString library for Wiring & Arduino

...mostly rewritten by Paul Stoffregen...

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Appending to SafeStrings using print()/println()  
Examples of how to use the standard print()/println() to append and format different data types to SafeStrings

by Matthew Ford  
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OBD\_Processor.ino for SafeString V4.0.0+

Example of using SafeString to process Car OnBoardData

by Matthew Ford  
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SafeStringReader\_Assign.ino

This example = to SafeStringReader

by Matthew Ford

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SafeString Case changes

Examples of how to change the case of a SafeString

by Matthew Ford

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\* /opt/cola/permits/1439711747\_1665547780.0078397/0/safestring-4-1-24-zip/SafeString-4.1.24/examples/SafeString\_Tests/SafeStringCaseChanges/SafeStringCaseChanges.ino

## 1.67 sqlite 3.39.3

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## 1.71 strace 5.19

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## 1.73 fdisk 2.38.1

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```
NR START END SECTORS SIZE NAME UUID
1 32 7679 7648 3.7M 8f8378c0-01
2 7680 16383 8704 4.3M 8f8378c0-02
5 7936 12799 4864 2.4M
6 12544 16127 3584 1.8M
```

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## 1.75 lua 2.1

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## 1.77 libtool 0.1

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## 1.78 sysv-init 3.04

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Constant-time SSSE3 AES core implementation.
version 0.1

By Mike Hamburg (Stanford University), 2009
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```
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## 1.81 libgcrypto 1.10.1

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## 1.84 glibc 2.36

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## 1.91 mpfr 4.1.1

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# 1.92 eudev 3.2.11

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## 1.93 libnettle6 3.8.1

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```
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This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

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```
#!/usr/bin/env bash
MIT licenses will each have a unique MD5 sum since they contain a unique copyright.
This script will read the license file into memory, strip out the copyright, and then
generate an MD5 that is not unique and can be matched against a known MIT MD5 sum.
set -e

calculate_md5_sum() {
 local FILE="$1"

 # Read the contents of the file into a variable
 local raw_license_text=$(<"$FILE")

 # Convert to lowercase
 local lowercase_license_text="${raw_license_text,,}"

 # Remove anything before the beginning of the license
 local stripped_license_text=$(awk '/permission is hereby granted,/{p=1} p' <<< "$lowercase_license_text")

 # Replace line breaks (Windows or Linux) with a single space
 local replaced_linebreaks=$(tr '\r\n' ' ' <<< "$stripped_license_text")

 # Replace multiple spaces with a single space
 local normalized_license_text=$(tr -s ' ' <<< "$replaced_linebreaks")

 # Strip away any non-printable, non-whitespace characters
 local clean_unprintable_license_text=$(tr
 -cd '[:print:][:space:]' <<< "$normalized_license_text")

 # Remove punctuation and special characters
 local clean_license_text=$(echo "$clean_unprintable_license_text" | sed 's/[^a-zA-Z]//g')

 # Calculate the MD5 sum of the cleaned license text
 local MD5SUM=$(echo -n "$clean_license_text" | md5sum | awk '{print $1}')
```

```

Output the MD5 sum
echo "$MD5SUM"
}

Check if the FILE argument is provided
if [-z "$1"]; then
echo "Please provide a FILE as an argument."
exit 1
fi

Invoke the function with the provided FILE argument
calculate_md5_sum "$1"
WEV @@ WEV[B "1
x ?"U@,5 @mISmIN<GimCN7g1u|E
43mI,5WEV @@ WEV @mImImIAmImImI0mImImI*mImI
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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization



created specifically to own Python-related Intellectual Property.  
Zope Corporation was a sponsoring member of the PSF.

All

Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now		
PSF	yes			

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Index: tdbsa/tdb.c

```
=====
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
/*
- Unix SMB/CIFS implementation.
+ trivial database library - standalone version

- trivial database library - private includes
-
- Copyright (C) Andrew Tridgell 2005
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This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

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#

# This is a Makefile stub which handles the creation of BSD shared

```

libraries.
#
In order to use this stub, the following makefile variables must be defined.
#
BSDLIB_VERSION = 1.0
BSDLIB_IMAGE = libce
BSDLIB_MYDIR = et
BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
@echo " MKDIR pic"
@mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image: $(BSD_LIB)

$(BSD_LIB): $(OBJS)
(cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS) $(OBJS))
$(MV) pic/$(BSD_LIB) .
$(RM) -f ../$(BSD_LIB)
(cd ..; $(LN) $(LINK_BUILD_FLAGS) \
`echo $(my_dir) | sed -e 's;lib/;;' /$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
@echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
@$(INSTALL_PROGRAM) $(BSD_LIB) \
$(DESTDIR)$$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
@-$(LDCONFIG)

install-strip: install

install-shlibs-strip: install-shlibs

uninstall-shlibs uninstall::
$(RM) -f $(DESTDIR)$$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
$(RM)
-rf pic
$(RM) -f $(BSD_LIB)
$(RM) -f ../$(BSD_LIB)
This package, the EXT2 filesystem utilities, are made available under
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```

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Theodore Ts'o  
23-June-2007

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```
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of author>
```

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```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes
with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

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```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
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```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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That's all there is to it!  
This is the Debian GNU/Linux prepackaged version of the Common Error  
Description library. It is currently distributed together with the EXT2 file  
system utilities, which are otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>,  
from sources obtained from a mirror of:  
[tsx-11.mit.edu/pub/linux/packages/ext2fs/](http://tsx-11.mit.edu/pub/linux/packages/ext2fs/)

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This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:

tsx-11.mit.edu:/pub/linux/packages/ext2fs/

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This is the Debian GNU/Linux prepackaged version of the EXT2 file system utilities (e2fsck, mke2fs, etc.). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from <http://sourceforge.net/projects/e2fsprogs>

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This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Fri Dec 14 22:24:35 EST 2007

It is part of the main e2fsprogs distribution, which can be found at:

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# 1.103 log-rotate 3.20.1

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Also add information on how to contact you by electronic and paper mail.

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```
Gnomovision version 69, Copyright
(C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands ``show w'` and ``show c'` should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ``show w'` and ``show c'`; they could even be mouse-clicks or menu items--whatever suits your program.

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```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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# 1.106 c-ares 1.18.1

## 1.106.1 Available under license :

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# 1.107 perl 5.36.0

## 1.107.1 Available under license :

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See /opt/CSCOpX/etc/complete\_copyright for full text.

This is perl, v5.24.1 built for MSWin32-x86-multi-thread

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## 1.108 tcpdump 4.99.1

### 1.108.1 Available under license :

```
-*- perl -*-
```

```
$testlist = [
 # This specific test fails on OpenBSD because the .pcap file uses DLT_RAW,
 # which OpenBSD treats as DLT_LOOP. The macro is set on all three BSDs.
 {
 config_unset => 'HAVE_NET_IF_PFLOG_H',
 name => 'heap-overflow-1',
 input => 'heap-overflow-1.pcap',
 output => 'heap-overflow-1.out',
 args => '-v'
 },
];
```

```
1;
```

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## 1.109 cracklib 2.9.8

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-----

Discussion thread from mailing list archive, with approval from everyone actively involved or holding original licensing rights included.

[Cracklib-devel] cracklib license  
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:16

Attachments: Message as HTML  
looks like 2.8.11 is out and marked as "GPL-2" ... releasing libraries unde=  
r=20  
GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists  
=2Dmike

Re: [Cracklib-devel] cracklib license

From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:18

I understand that, and you're welcome to bring it up with Alec directly and see if he wants to relicense his code as LGPL... but at this point, it was enough to just get it consistent and documented as to what it was released under. This wasn't actually a license change, just a clarification of the licensing that was already in place.=20

-- Nathan

=20

-----  
Nathan Neulinger EMail: nneul@um...

University of Missouri - Rolla Phone: (573) 341-6679

UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----

> From: cracklib-devel-bounces@li...

> [mailto:cracklib-devel-bounces@li...] On Behalf Of

> Mike Frysinger

> Sent: Monday, October 01, 2007 8:15 PM

> To: cracklib-devel@li...

> Subject: [Cracklib-devel] cracklib license

>=20

> looks like 2.8.11 is out and marked as "GPL-2" ... releasing

> libraries under

> GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists

> -mike

Re: [Cracklib-devel] cracklib license

From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:33

Attachments: Message as HTML

On Monday 01 October 2007, Neulinger, Nathan

wrote:

> I understand that, and you're welcome to bring it up with Alec directly  
> and see if he wants to relicense his code as LGPL... but at this point,  
> it was enough to just get it consistent and documented as to what it was  
> released under. This wasn't actually a license change, just a  
> clarification of the licensing that was already in place.

the original license (before moving to sourceforge -- aka, 2.7) was not=20  
GPL-2 ... it was a modified artistic license ... i didnt notice the license=  
=20

change until it was mentioned in the latest notes.

unlike the old license, GPL-2 prevents people from using cracklib unless th=  
eir=20  
applications are also GPL-2 which imo is just wrong. it isnt the place of =  
a=20  
library to dictact to application writes what license they should be using.=  
=20  
thus LGPL-2.1 enters to fill this void.  
=2Dmike

Re: [Cracklib-devel]

cracklib license

From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:46

Seems like the ideal thing here would be for you and the other distro maintainers to get together with Alec in a conversation and come to a decision as to what licensing scheme y'all want. I haven't really done much other than cleaning up the packaging and patches and a small bit of additional code, so whatever licensing y'all come up with is fine by me.

-- Nathan  
=20

-----  
Nathan Neulinger EMail: nneul@um...  
University of Missouri - Rolla Phone: (573) 341-6679  
UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----

> From: cracklib-devel-bounces@li...  
> [mailto:cracklib-devel-bounces@li...] On Behalf Of  
> Mike Frysinger  
> Sent: Monday, October 01, 2007 8:33 PM  
> To: Neulinger, Nathan  
> Cc: cracklib-devel@li...; Alec Muffett  
> Subject: Re: [Cracklib-devel] cracklib license  
>=20

> On Monday 01 October 2007, Neulinger, Nathan wrote:  
>> I understand that, and you're welcome to bring it up with Alec  
> directly  
>> and see if he wants to relicense his code as LGPL... but at this  
> point,  
>> it was enough to just get it consistent and documented as to what  
> it was  
>> released under. This wasn't actually a license change, just a  
>> clarification of the licensing that was already in place.  
>=20  
> the original license (before moving to sourceforge -- aka, 2.7) was  
> not  
> GPL-2 ... it was a modified artistic license ... i didnt notice the

> license  
> change until it was mentioned in the latest notes.  
>=20  
> unlike the old license, GPL-2 prevents people from using cracklib  
> unless their  
> applications are also GPL-2 which imo is just wrong. it isnt the  
> place of a  
> library  
to dictact to application writes what license they should  
> be using.  
> thus LGPL-2.1 enters to fill this void.  
> -mike

Re: [Cracklib-devel] cracklib license

From: Alec Muffett <alecm@cr...> - 2007-10-02 08:57

> Seems like the ideal thing here would be for you and the other distro  
> maintainers to get together with Alec in a conversation and come to a  
> decision as to what licensing scheme y'all want. I haven't really done  
> much other than cleaning up the packaging and patches and a small  
> bit of  
> additional code, so whatever licensing y'all come up with is fine  
> by me.

I am sympathetic. Guys, what do you reckon?

What I am hearing so far is that LGPL makes sense, since it can be  
linked with any code, not just GPL...

-a

Re: [Cracklib-devel] cracklib license

From: Devin Reade <gdr@gn...> - 2007-10-02 15:04

I would like to see it under LGPL as well. I  
think it is in everyone's  
best interests to have as secure systems as possible, and I think tainting  
it via GPL will just make it less likely that the library gets used, and  
will not usually cause companies/developers to GPL the dependent code  
(where it is not already GPL).

I like GPL, I use it when I can, but I don't think that it's the correct  
license in this situation.

Devin

--

If it's sinful, it's more fun.

Re: [Cracklib-devel] cracklib license

From: Nalin Dahyabhai <nalin@re...> - 2008-01-28 16:32

On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:

>> Seems like the ideal thing here would be for you and the other distro  
>> maintainers to get together with Alec in a conversation and come to a  
>> decision as to what licensing scheme y'all want. I haven't really done  
>> much other than cleaning up the packaging and patches and a small  
>> bit of  
>> additional

code, so whatever licensing y'all come up with is fine

>> by me.

>

> I am sympathetic. Guys, what do you reckon?

>

> What I am hearing so far is that LGPL makes sense, since it can be  
> linked with any code, not just GPL...

My apologies for not chiming in in anything resembling a reasonable  
timeframe.

I'd also suggest the LGPL, for the reason you noted above. Alternately,  
GPLv2 with the option of using the library under a later version of the  
GPL would permit applications which were released under version 3 of the  
GPL to use the library, too, which would be sufficient for the packages  
which are included in Fedora. FWIW, I'd personally lean toward LGPL.

In any case, I thank you both for working on sorting this out.

Cheers,

Nalin

Re: [Cracklib-devel] cracklib license

From: Mike Frysinger <vapier@ge...> - 2008-10-05 21:27

Attachments: Message as HTML

On Monday 28 January 2008, Nalin Dahyabhai wrote:

> On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:  
>>> Seems like the ideal thing here would be for you and the other distro  
>>> maintainers to get together with Alec in a conversation and come to a  
>>> decision as to what licensing scheme y'all want. I haven't really done  
>>> much other than cleaning up the packaging and patches and a small  
>>> bit of  
>>> additional code, so whatever licensing y'all come up with is fine  
>>> by me.



>>  
>> I am sympathetic. Guys, what do you reckon?  
>>  
>> What I am hearing so far is that LGPL makes sense, since it can be  
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>  
> My apologies for not chiming in in anything resembling a reasonable  
> timeframe.  
>  
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> GPLv2 with the option of using  
the library under a later version of the  
> GPL would permit applications which were released under version 3 of the  
> GPL to use the library, too, which would be sufficient for the packages  
> which are included in Fedora. FWIW, I'd personally lean toward LGPL.  
>  
> In any case, I thank you both for working on sorting this out.

looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make  
the change now ?  
-mike

Re: [Cracklib-devel] cracklib license

From: Alec Muffett <alecm@cr...> - 2008-10-05 23:18

>> In any case, I thank you both for working on sorting this out.  
>  
> looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make  
> the change now ?

yes. go for it. thanks++

-a

Re: [Cracklib-devel] cracklib license

From: Mike Frysinger <vapier@ge...> - 2008-10-25 22:34

Attachments: Message as HTML

On Sunday 05 October

2008, Alec Muffett wrote:

>>> In any case, I thank you both for working on sorting this out.  
>>  
>> looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we  
>> make the change now ?  
>  
> yes. go for it. thanks++

Nathan Neulinger is the only one who can actually make said change ...

-mike

-----  
BELOW IS ORIGINAL LICENSING DISCUSSION RE CHANGING TO GPL from Artistic.  
-----

CrackLib was originally licensed with a variant of the Artistic license. In the interests of wider acceptance and more modern licensing, it was switched with the original author's blessing to GPL v2.

This approval was carried out in email discussions in 2005, and has been reconfirmed as of 2007-10-01 with the following email from Alec Muffett.

The below email references nneul@umr.edu address, as that is the address that was used at the time. For any future emails regarding this, please use nneul@neulinger.org.

-----

From  
alecm@crypticide.com Mon Oct 1 12:26:03 2007  
Received: from umr-exproto2.cc.umr.edu ([131.151.0.192]) by UMR-CMAIL1.umr.edu with Microsoft SMTPSVC(6.0.3790.3959);  
Mon, 1 Oct 2007 12:26:03 -0500  
Received: from scansrv2.srv.mst.edu ([131.151.1.114]) by umr-exproto2.cc.umr.edu with Microsoft SMTPSVC(6.0.3790.3959);  
Mon, 1 Oct 2007 12:26:02 -0500  
Received: (qmail 8022 invoked from network); 1 Oct 2007 16:59:55 -0000  
Received: from smtp1.srv.mst.edu (131.151.1.43)  
by scanin-ipvs.cc.umr.edu with SMTP; 1 Oct 2007 16:59:55 -0000  
Received: from spunkymail-mx8.g.dreamhost.com (mx1.spunky.mail.dreamhost.com [208.97.132.47])  
by smtp1.srv.mst.edu (8.13.1/8.13.1) with ESMTP id 191Gxtpr020623  
for <nneul@umr.edu>; Mon, 1 Oct 2007 11:59:55 -0500  
Received: from rutherford.zen.co.uk (rutherford.zen.co.uk [212.23.3.142])  
by spunkymail-mx8.g.dreamhost.com (Postfix) with ESMTP id 2C7734D311  
for <nneul@neulinger.org>; Mon, 1 Oct 2007 09:59:50 -0700 (PDT)  
Received: from  
[82.68.43.14] (helo=[192.168.1.3])  
by rutherford.zen.co.uk with esmtp (Exim 4.50)  
id 1IcOcX-0004Qt-6L  
for nneul@neulinger.org; Mon, 01 Oct 2007 16:59:49 +0000  
Mime-Version: 1.0 (Apple Message framework v752.2)  
In-Reply-To: <1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>

References: <1190922867.3457.147.camel@localhost.localdomain>  
<EC90713277D2BE41B7110CCD74E235CEF44F38@UMR-CMAIL1.umr.edu>  
<1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>  
Content-Type: text/plain; charset=US-ASCII; delp=yes; format=flowed  
Message-Id: <117A1264-F6DC-4E25-B0DD-56FBFE6E9F@crypticide.com>  
Content-Transfer-Encoding: 7bit  
From: Alec Muffett <alecm@crypticide.com>  
Subject: Re: cracklib license  
Date: Mon, 1 Oct 2007 17:59:46 +0100  
To: Nathan Neulinger <nneul@neulinger.org>  
X-Mailer: Apple Mail (2.752.2)  
X-Originating-Rutherford-IP: [82.68.43.14]  
Return-Path: alecm@crypticide.com  
X-OriginalArrivalTime: 01 Oct 2007 17:26:03.0008 (UTC) FILETIME=[2420C000:01C80450]  
Status: RO  
Content-Length:  
585  
Lines: 21

>  
> ----- Forwarded message -----  
> From: Neulinger, Nathan <nneul@umr.edu>  
> Date: Sep 27, 2007 2:58 PM  
> Subject: RE: cracklib license  
> To: alecm@crypto.dircon.co.uk  
>  
> Any chance you could write me a self-contained email stating clearly  
> that the license is being changed to GPL, so I could include that  
> email  
> in the repository and clean up the repository/tarballs? I have all the  
> original discussion, but something succinct and self contained  
> would be  
> ideal.

The license for my code in the Cracklib distribution is henceforth GPL.

Happy now? :-)

-a

# 1.110 autogen 4.2.8p15

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Version 3, 29 June 2007

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** ** ** ** ** ** ~~~~~
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                               ~~~~~
```

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Alexander L. Roshal

# 1.112 pam 1.5.2

## 1.112.1 Available under license :

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## 1.113 makedumpfile 0.187

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## 1.114 cryptography 37.0.4

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# 1.115 python-setuptools 65.0.2

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## 1.116 libunwind 1.5

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# 1.117 cJSON 1.5.4

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### Contributors

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- \* [Ajay Bhargav](https://github.com/ajaybhargav)
- \* [Alper Akcan](https://github.com/alperakcan)
- \* [Anton Sergeev](https://github.com/anton-sergeev)
- \* [Christian Schulze](https://github.com/ChristianSch)
- \* [Dave Gamble](https://github.com/DaveGamble)
- \* [Debora Grosse](https://github.com/DeboraG)
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- \* Eswar Yaganti
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## 1.118 kmod 30-r0

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