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pycrypto

A collection of both secure hash functions (such as SHA256 and RIPEMD160), and various encryption algorithms (AES, DES, RSA, ElGamal, etc.).

openssl

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The OpenSSL Project is a collaborative effort to develop a robust, commercial-grade, full-featured, and Open Source toolkit implementing the Transport Layer Security (TLS) and Secure Sockets Layer (SSL) protocols as well as a full-strength general purpose cryptography library.

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alabaster

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astor -- AST observe/rewrite

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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

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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 Year Owner GPL- from 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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Chris Colbert began the Kiwi project in December 2013 in an effort to create a blisteringly fast UI constraint solver. Chris is still the project lead.

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buildscripts/appveyor/run_with_env.cmd:

```
:: From https://github.com/ogrisel/python-appveyor-demo
::
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:: variables to use the MSVC 2010 C++ compilers from GRMSDKX EN DVD.iso of:
:: MS Windows SDK for Windows 7 and .NET Framework 4 (SDK v7.1)
:: To build extensions for 64 bit Python 2, we need to configure environment
:: variables to use the MSVC 2008 C++ compilers from GRMSDKX EN DVD.iso of:
:: MS Windows SDK for Windows 7 and .NET Framework 3.5 (SDK v7.0)
:: 32 bit builds, and 64-bit builds for 3.5 and beyond, do not require specific
:: environment configurations.
:: Note: this script needs to be run with the /E:ON and /V:ON flags for the
:: cmd interpreter, at least for (SDK v7.0)
:: More details at:
:: https://github.com/cython/cython/wiki/64BitCythonExtensionsOnWindows
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/numba/_hashtable.c:

```
/* The implementation of the hash table (_Numba_hashtable_t) is based on the cfuhash
project:
http://sourceforge.net/projects/libcfu/
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Creation date: 2005-06-24 21:22:40

Authors: Don Change log:

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/apps/vms_term_sock.h:
/crypto/aes/asm/aes-586.pl:
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/crypto/aes/asm/aesarmv4.pl:
/crypto/aes/asm/aes-mips.pl:
/crypto/aes/asm/aesni-mb-x86_64.pl:
/crypto/aes/asm/aesni-sha1-x86_64.pl
/crypto/aes/asm/aesni-sha256-x86_64.pl
/crypto/aes/asm/aesni-x86_64.pl
/crypto/aes/asm/aesni-x86.pl
/crypto/aes/asm/aesp8-ppc.pl
/crypto/aes/asm/aes-parisc.pl
/crypto/aes/asm/aes-ppc.pl
/crypto/aes/asm/aes-s390x.pl
/crypto/aes/asm/aesv8-armx.pl
```

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/crypto/aes/asm/aes-x86_64.pl /crypto/bn/asm/alpha-mont.pl /crypto/bn/asm/armv4-gf2m.pl /crypto/bn/asm/armv4-mont.pl /crypto/bn/asm/ia64-mont.pl /crypto/bn/asm/mips3-mont.pl /crypto/bn/asm/mips-mont.pl /crypto/bn/asm/parisc-mont.pl /crypto/bn/asm/ppc64-mont.pl /crypto/bn/asm/ppc-mont.pl /crypto/bn/asm/ppc-mont.pl /crypto/bn/asm/s390x-gf2m.pl /crypto/bn/asm/s390x-mont.pl /crypto/bn/asm/sparcv9a-mont.pl /crypto/bn/asm/sparcv9-gf2m.pl /crypto/bn/asm/sparcv9-mont.pl /crypto/bn/asm/via-mont.pl /crypto/bn/asm/vis3-mont.pl /crypto/bn/asm/x86_64-gf2m.pl /crypto/bn/asm/x86_64-mont5.pl /crypto/bn/asm/x86_64-mont.pl /crypto/bn/asm/x86-gf2m.pl /crypto/bn/asm/x86-mont.pl: /crypto/modes/asm/aesni-gcm-x86_64.pl /crypto/modes/asm/ghash-alpha.pl /crypto/modes/asm/ghash-armv4.pl /crypto/modes/asm/ghash-ia64.pl /crypto/modes/asm/ghashp8-ppc.pl /crypto/modes/asm/ghash-parisc.pl /crypto/modes/asm/ghash-s390x.pl /crypto/modes/asm/ghash-sparcv9.pl /crypto/modes/asm/ghashv8-armx.pl /crypto/modes/asm/ghash-x86_64.pl /crypto/modes/asm/ghash-x86.pl /crypto/rc4/asm/rc4-586.pl /crypto/rc4/asm/rc4-md5-x86_64.pl /crypto/rc4/asm/rc4-parisc.pl /crypto/rc4/asm/rc4-s390x.pl /crypto/rc4/asm/rc4-x86_64.pl /crypto/sha/asm/sha1-586.pl

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```
/crypto/sha/asm/sha1-alpha.pl
/crypto/sha/asm/sha1-armv4-large.pl
/crypto/sha/asm/sha1-armv8.pl:
/crypto/sha/asm/sha1-ia64.pl:
/crypto/sha/asm/sha1-mb-x86_64.pl:
/crypto/sha/asm/sha1-mips.pl:
/crypto/sha/asm/sha1-parisc.pl:
/crypto/sha/asm/sha1-ppc.pl:
/crypto/sha/asm/sha1-s390x.pl:
/crypto/sha/asm/sha1-sparcv9a.pl:
/crypto/sha/asm/sha1-thumb.pl
/crypto/sha/asm/sha1-x86_64.pl
/crypto/sha/asm/sha256-586.pl:
crypto/sha/asm/sha256-mb-x86_64.pl
/crypto/sha/asm/sha512-586.pl
/crypto/sha/asm/sha512-armv4.pl
/crypto/sha/asm/sha512-armv8.pl
/crypto/sha/asm/sha512-ia64.pl
/crypto/sha/asm/sha512-mips.pl
/crypto/sha/asm/sha512p8-ppc.pl
/crypto/sha/asm/sha512-parisc.pl
/crypto/sha/asm/sha512-ppc.pl
/crypto/sha/asm/sha512-s390x.pl
______
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/crypto/aes/asm/aes-ia64.S:
/crypto/aes/asm/aes-sparcv9.pl
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/crypto/aes/asm/aest4-sparcv9.pl
```

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# -----
/crypto/aes/asm/bsaes-armv7.pl:
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# -----
/crypto/bn/asm/ia64.S
/crypto/bn/asm/mips3.s
/crypto/bn/asm/mips.pl
/crypto/bn/asm/s390x.S
/crypto/bn/asm/sparcv8plus.S
/crypto/bn/asm/sparcv8.S
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/crypto/bn/asm/sparct4-mont.pl
/crypto/camellia/asm/cmllt4-sparcv9.pl
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/crypto/camellia/asm/cmll-x86_64.pl:
/crypto/camellia/asm/cmll-x86.pl:
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```

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# -----
/crypto/ec/asm/ecp_nistz256-avx2.pl:
/crypto/ec/asm/ecp_nistz256-x86_64.pl:
/crypto/ec/ecp_nistz256.c:
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/crypto/md5/asm/md5-sparcv9.pl:
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/crypto/sha/asm/sha512-sparcv9.pl:
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# -----
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/crypto/sha/asm/sha256-armv4.pl
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# -----
/crypto/sha/asm/sha512-x86_64.pl:
/crypto/whrlpool/asm/wp-mmx.pl:
/crypto/whrlpool/asm/wp-x86_64.pl:
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/crypto/asn1/charmap.pl:
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/engines/ccgost/gost2001_keyx.c
/engines/ccgost/gost89.c
/engines/ccgost/gost89.h
/engines/ccgost/gost94_keyx.c
/engines/ccgost/gost_ameth.c
/engines/ccgost/gost_asn1.c
/engines/ccgost/gost_crypt.c
/engines/ccgost/gost_ctl.c
/engines/ccgost/gost_eng.c
/engines/ccgost/gosthash.c
/engines/ccgost/gosthash.h
/engines/ccgost/gost_keywrap.c
/engines/ccgost/gost_keywrap.h
/engines/ccgost/gost_lcl.h
/engines/ccgost/gost_md.c
/engines/ccgost/gost_params.c
/engines/ccgost/gost_params.h
/engines/ccgost/gost_pmeth.c
/engines/ccgost/gost_sign.c
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```



```
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/crypto/ec/ec2_smpl.c

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* This is designed to exercise the code paths in
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* which have frequently been affected by regressions in DTLS1 BAD VER
* support.
* Note that unlike other SSL tests, we don't test against our own SSL
* server method. Firstly because we don't have one; we *only* support
* DTLS1 BAD VER as a client. And secondly because even if that were
* fixed up it's the wrong thing to test against - because if changes
* are made in generic DTLS code which don't take DTLS1 BAD VER into
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* Unit test for TLS heartbeats.
* Acts as a regression test against the Heartbleed bug (CVE-2014-0160).
* Author: Mike Bland (mbland@acm.org, http://mike-bland.com/)
* Date:
           2014-04-12
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/test/ssltestlib.c:
/test/ssltestlib.h:
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```



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```
/* Small excerpts from the Tcl / Tk 8.6 headers

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for distribution under the standard PIL license in 2009." */

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```
/docs/example/DdsImagePlugin.py:
/PIL/BlpImagePlugin.py
/src/PIL/[multiple files]:
Jerome Leclanche <jerome@leclan.ch>
Documentation:
 https://web.archive.org/web/20170802060935/http://oss.sgi.com/projects/ogl-
sample/registry/EXT/texture_compression_s3tc.txt
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/src/libImaging/BcnDecode.c:
/*
* The Python Imaging Library
 * decoder for DXTn-compressed data
 * Format documentation:
          https://web.archive.org/web/20170802060935/http://oss.sgi.com/projects/ogl-
sample/registry/EXT/texture compression s3tc.txt
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/src/PIL/MspImagePlugin.py:
# The Python Imaging Library.
# MSP file handling
# This is the format used by the Paint program in Windows 1 and 2.
#
# History:
       95-09-05 fl Created
#
       97-01-03 fl Read/write MSP images
       17-02-21 es Fixed RLE interpretation
# Copyright (c) Secret Labs AB 1997.
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# Page 313:
# Figure 205. Windows Paint Version 1: "DanM" Format
# Figure 206. Windows Paint Version 2: "Lins" Format. Used in Windows V2.03
# See also: http://www.fileformat.info/format/mspaint/egff.htm
```

[...]



```
# The algo for the MSP decoder is from
    # http://www.fileformat.info/format/mspaint/egff.htm
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    # Encyclopedia of Graphics File Formats and is licensed by
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```
* pyCMS
* a Python / PIL interface to the littleCMS ICC Color Management System
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*
* pyCMS home page: http://www.cazabon.com/pyCMS
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*/
```

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- ./PyInstaller/loader

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- * Hartmut Goebel
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mode: rst
ispell-local-dictionary: "american"
End:

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/bootloader/zlib/unzip.*:
Version 1.01e, February 12th, 2005
Copyright (C) 1998-2005 Gilles Vollant
```

/* Decryption code comes from crypt.c by Info-ZIP but has been greatly reduced in terms of compatibility with older software. The following is from the original crypt.c. Code woven in by Terry Thorsen 1/2003.

/ /

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/*

crypt.c (full version) by Info-ZIP. Last revised: [see crypt.h]

The encryption/decryption parts of this source code (as opposed to the non-echoing password parts) were originally written in Europe. The whole source package can be freely distributed, including from the USA. (Prior to January 2000, re-export from the US was a violation of US law.)

/ /

This encryption code is a direct transcription of the algorithm from Roger Schlafly, described by Phil Katz in the file appnote.txt. This file (appnote.txt) is distributed with the PKZIP program (even in the version without encryption capabilities).

* /

/bootloader/zlib/zlib.h:

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/* zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.8, April 28th, 2013

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Jean-loup Gailly Mark Adler

jloup@gzip.org madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for



Comments) 1950 to 1952 in the files http://tools.ietf.org/html/rfc1950 (zlib format), rfc1951 (deflate format) and rfc1952 (gzip format).
*/

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In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see $\underline{\text{http://www.cnri.reston.va.us}}$) 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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```
year = 2017,
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abstract = {
```

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```
},
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journal = {PeerJ Computer Science},
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url = {https://doi.org/10.7717/peerj-cs.103},
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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.

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Release	Derived	Year	Owner	GPL-
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1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no

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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
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Version 2, June 1991

Last updated: 7/18/2019

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[This is the first released version of the library GPL. It is numbered 2 because it goes with version 2 of the ordinary GPL.]

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not use the libraries. We concluded that weaker conditions might promote sharing better.

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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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