NAME
zlib – compression/decompression library

SYNOPSIS
[see zlib.h for full description]

DESCRIPTION
The zlib library is a general purpose data compression library. The code is thread safe, assuming
that the standard library functions used are thread safe, such as memory allocation routines. It
provides in-memory compression and decompression functions, including integrity checks of the
uncompressed data. This version of the library supports only one compression method (defla-
tion) but other algorithms may be added later with the same stream interface.

Compression can be done in a single step if the buffers are large enough or can be done by
repeated calls of the compression function. In the latter case, the application must provide more
input and/or consume the output (providing more output space) before each call.

The library also supports reading and writing files in gzip(1) (.gz) format with an interface similar
to that of stdio.

The library does not install any signal handler. The decoder checks the consistency of the com-
pressed data, so the library should never crash even in the case of corrupted input.

All functions of the compression library are documented in the file zlib.h. The distribution source
includes examples of use of the library in the files test/example.c and test/minigzip.c, as well as
other examples in the examples/directory.

Changes to this version are documented in the file ChangeLog that accompanies the source.

zlib is built in to many languages and operating systems, including but not limited to Java, Python,
.NET, PHP, Perl, Ruby, Swift, and Go.

An experimental package to read and write files in the .zip format, written on top of zlib by Gilles
Vollant (info@winimage.com), is available at:

http://www.winimage.com/zLibDll/minizip.html and also in the contrib/minizip directory of
the main zlib source distribution.

SEE ALSO
The zlib web site can be found at:

http://zlib.net/

The data format used by the zlib library is described by RFC (Request for Comments) 1950 to
1952 in the files:

http://tools.ietf.org/html/rfc1950 (for the zlib header and trailer format)
http://tools.ietf.org/html/rfc1951 (for the deflate compressed data format)
http://tools.ietf.org/html/rfc1952 (for the gzip header and trailer format)

Mark Nelson wrote an article about zlib for the Jan. 1997 issue of Dr. Dobb's Journal; a copy of
the article is available at:

http://marknelson.us/1997/01/01/zlib-engine/

REPORTING PROBLEMS
Before reporting a problem, please check the zlib web site to verify that you have the latest ver-
sion of zlib; otherwise, obtain the latest version and see if the problem still exists. Please read
the zlib FAQ at:

http://zlib.net/zlib_faq.html

before asking for help. Send questions and/or comments to zlib@gzip.org, or (for the Windows
DLL version) to Gilles Vollant (info@winimage.com).
AUTHORS AND LICENSE

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The deflate format used by zlib was defined by Phil Katz. The deflate and zlib specifications were written by L. Peter Deutsch. Thanks to all the people who reported problems and suggested various improvements in zlib; who are too numerous to cite here.