

# About Jeff Glatt's LiteZip library

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Jeff Glatt is one the best programmers whose work are very helpful and interested. His articles regarding COM and WebControl in plain C are very good. **LiteZip** is his useful project. The source of the library was taken from Jeff Glatt's article on [www.codeproject.com](http://www.codeproject.com).

## LiteZip/LiteUnzip

This project is largely based upon work by *Lucian Wischik*, who in turn based his work on gzip 1.1.4, zlib, and info-zip, which are by *Jean-Loup Gailly* and *Mark Adler*. Lucian's code has been reworked to be written in plain C, using only the Win32 API, and packaged into two DLLs LiteZip.dll and LiteUnzip.dll. The former has functions to create a ZIP archive (i.e., compress numerous files into a ZIP file). The latter has functions to extract the contents of a ZIP archive.

## Zip-file entry

The **ZIPENTRY** structure is used to retrieve info about an entry in an archive. The structure members are:

|                 |                   |                                                                                                                       |
|-----------------|-------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>DWORD</b>    | Index;            | Index of the entry within the zip archive                                                                             |
| <b>DWORD</b>    | Attributes;       | Attributes, the same as for <b>GetFileAttributes</b> function.                                                        |
| <b>FILETIME</b> | AccessTime;       | This is the time of access to the entry. (See remarks section).                                                       |
| <b>FILETIME</b> | CreateTime;       |                                                                                                                       |
| <b>FILETIME</b> | ModifyTime;       |                                                                                                                       |
| <b>ULONG</b>    | CompressedSize;   | Compressed sizes of the entry compressed and uncompressed. These may be -1 if not yet known (e.g. being streamed in). |
| <b>ULONG</b>    | UncompressedSize; | Uncompressed sizes of the entry. These may be -1 if not yet known (e.g. being streamed in).                           |
| <b>TCHAR</b>    | Name[MAX_PATH];   | The entry name                                                                                                        |

## Remarks

To convert a **FILETIME** structure into a time that is easy to display to a user, use the **FileTimeToSystemTime** function.

## Error codes

These error code are returned by any function of the library is failed due to some reasons.

*The following come from general system stuff (e.g. when the file cannot be opened)*

|                 |                                                                          |
|-----------------|--------------------------------------------------------------------------|
| ZR_NOFILE       | Can't create/open the file                                               |
| ZR_NOALLOC      | Failed to allocate memory                                                |
| ZR_WRITE        | A general error writing to the file                                      |
| ZR_NOTFOUND     | Can't find the specified file in the zip                                 |
| ZR_MORE         | There's still more data to be unzipped                                   |
| ZR_CORRUPT      | The zip-file is corrupt or not a zip-file                                |
| ZR_READ         | An error reading the file                                                |
| ZR_NOTSUPPORTED | The entry is in a format that can't be decompressed by this Unzip add-on |

*The following come from mistakes on the part of the caller*

|            |                                                                                 |
|------------|---------------------------------------------------------------------------------|
| ZR_ARGS    | Bad arguments passed                                                            |
| ZR_NOTMMAP | Tried to call <b>ZipGetMemory</b> function for a file that is not memory mapped |
| ZR_MEMSIZE | The memory-buffer size is too small                                             |
| ZR_FAILED  | Already failed when you called this function                                    |
| ZR_ENDED   | The zip creation has already been closed                                        |
| ZR_MISIZE  | The source file size turned out mistaken                                        |
| ZR_ZMODE   | Tried to mix creating/opening a zip                                             |

*The following come from bugs within the zip library itself*

|             |                                               |
|-------------|-----------------------------------------------|
| ZR_SEEK     | Trying to seek in an file that cannot be seek |
| ZR_NOCHANGE | Changed its mind on storage, but not allowed  |
| ZR_FLATE    | An error in the de/inflation code             |
| ZR_PASSWORD | Password is incorrect                         |