

Bzip2

Introduction

The bzip2 functions are used to transparently read and write bzip2 (.bz2) compressed files.

Installing/Configuring

Requirements

This module uses the functions of the [» bzip2](#) library by Julian Seward. This module requires bzip2/libbzip2 version $\geq 1.0.x$.

Installation

Bzip2 support in PHP is not enabled by default. You will need to use the `--with-bz2[=DIR]` configuration option when compiling PHP to enable bzip2 support.

Runtime Configuration

This extension has no configuration directives defined in *php.ini*.

Resource Types

This extension defines one resource type: a file pointer identifying the bz2-file to work on.

Predefined Constants

This extension has no constants defined.

Examples

This example opens a temporary file and writes a test string to it, then prints out the contents of the file.

Example #1 - Small bzip2 Example

```
<?php

$filename = "/tmp/testfile.bz2";
$str = "This is a test string.\n";

// open file for writing
$bz = bzopen($filename, "w");

// write string to file
bzwrite($bz, $str);

// close file
bzclose($bz);

// open file for reading
$bz = bzopen($filename, "r");

// read 10 characters
echo bzread($bz, 10);

// output until end of the file (or the next 1024 char) and close it.
echo bzread($bz);

bzclose($bz);

?>
```

Bzip2 Functions

bzclose

bzclose -- Close a bzip2 file

Description

int **bzclose** (resource \$bz)

Closes the given bzip2 file pointer.

Parameters

bz

The file pointer. It must be valid and must point to a file successfully opened by [bzopen\(\)](#).

Return Values

Returns **TRUE** on success or **FALSE** on failure.

See Also

- [bzopen\(\)](#)

bzcompress

bzcompress -- Compress a string into bzip2 encoded data

Description

mixed bzcompress (string *\$source* [, int *\$blocksize* [, int *\$workfactor*]])

[bzcompress\(\)](#) compresses the given string and returns it as bzip2 encoded data.

Parameters

source

The string to compress.

blocksize

Specifies the blocksize used during compression and should be a number from 1 to 9 with 9 giving the best compression, but using more resources to do so. *blocksize* defaults to 4.

workfactor

Controls how the compression phase behaves when presented with worst case, highly repetitive, input data. The value can be between 0 and 250 with 0 being a special case and 30 being the default value. Regardless of the *workfactor*, the generated output is the same.

Return Values

The compressed string or number of error in case of error.

Examples

Example #2 - Compressing data

```
<?php
$str = "sample data";
$bzstr = bzcompress($str, 9);
echo $bzstr;
?>
```

See Also

- [bzdecompress\(\)](#)

bzdecompress

bzdecompress -- Decompresses bzip2 encoded data

Description

mixed bzdecompress (string `$source` [, int `$small`])

[bzdecompress\(\)](#) decompresses the given string containing bzip2 encoded data.

Parameters

source

The string to decompress.

small

If **TRUE**, an alternative decompression algorithm will be used which uses less memory (the maximum memory requirement drops to around 2300K) but works at roughly half the speed. See the [» bzip2 documentation](#) for more information about this feature.

Return Values

The decompressed string or number of error in case of error.

Examples

Example #3 - Decompressing a String

```
<?php
$start_str = "This is not an honest face?";
$bzstr = bzcompress($start_str);

echo "Compressed String: ";
echo $bzstr;
echo "\n<br />\n";

$str = bzdecompress($bzstr);
echo "Decompressed String: ";
echo $str;
echo "\n<br />\n";
?>
```

See Also

- [bzcompress\(\)](#)

bzerrno

bzerrno -- Returns a bzip2 error number

Description

int **bzerrno** (resource \$bz)

Returns the error number of any bzip2 error returned by the given file pointer.

Parameters

bz

The file pointer. It must be valid and must point to a file successfully opened by [bzopen\(\)](#).

Return Values

Returns the error number as an integer.

See Also

- [bzerror\(\)](#)
- [bzerrstr\(\)](#)

bzerror

`bzerror` -- Returns the bzip2 error number and error string in an array

Description

array **bzerror** (resource \$bz)

Returns the error number and error string of any bzip2 error returned by the given file pointer.

Parameters

bz

The file pointer. It must be valid and must point to a file successfully opened by [bzopen\(\)](#).

Return Values

Returns an associative array, with the error code in the *errno* entry, and the error message in the *errstr* entry.

Examples

Example #4 - [bzerror\(\)](#) example

```
<?php
$error = bzerror($bz);

echo $error["errno"];
echo $error["errstr"];
?>
```

See Also

- [bzerrno\(\)](#)
- [bzerrstr\(\)](#)

bzerrstr

bzerrstr -- Returns a bzip2 error string

Description

string **bzerrstr** (resource \$bz)

Gets the error string of any bzip2 error returned by the given file pointer.

Parameters

bz

The file pointer. It must be valid and must point to a file successfully opened by [bzopen\(\)](#).

Return Values

Returns a string containing the error message.

See Also

- [bzerrno\(\)](#)
- [bzerror\(\)](#)

bzflush

bzflush -- Force a write of all buffered data

Description

int **bzflush** (resource \$bz)

Forces a write of all buffered bzip2 data for the file pointer *bz*.

Parameters

bz

The file pointer. It must be valid and must point to a file successfully opened by [bzopen\(\)](#).

Return Values

Returns **TRUE** on success or **FALSE** on failure.

See Also

- [bzread\(\)](#)
- [bzwrite\(\)](#)

bzopen

bzopen -- Opens a bzip2 compressed file

Description

resource **bzopen** (string \$filename, string \$mode)

[bzopen\(\)](#) opens a bzip2 (.bz2) file for reading or writing.

Parameters

filename

The name of the file to open.

mode

Similar to the [fopen\(\)](#) function ('r' for read, 'w' for write, etc.).

Return Values

If the open fails, [bzopen\(\)](#) returns **FALSE**, otherwise it returns a pointer to the newly opened file.

Examples

Example #5 - [bzopen\(\)](#) example

```
<?php

$file = "/tmp/foo.bz2";
$bz = bzopen($file, "r") or die("Couldn't open $file for reading");

bzclose($bz);

?>
```

See Also

- [bzclose\(\)](#)

bzread

bzread -- Binary safe bzip2 file read

Description

string **bzread** (resource \$bz [, int \$length])

[bzread\(\)](#) reads from the given bzip2 file pointer.

Reading stops when *length* (uncompressed) bytes have been read or EOF is reached, whichever comes first.

Parameters

bz

The file pointer. It must be valid and must point to a file successfully opened by [bzopen\(\)](#).

length

If not specified, [bzread\(\)](#) will read 1024 (uncompressed) bytes at a time.

Return Values

Returns the uncompressed data, or **FALSE** on error.

Examples

Example #6 - [bzread\(\)](#) example

```
<?php

$file = "/tmp/foo.bz2";
$bz = bzopen($file, "r") or die("Couldn't open $file");

$decompressed_file = '';
while (!feof($bz)) {
    $decompressed_file .= bzread($bz, 4096);
}
bzclose($bz);

echo "The contents of $file are: <br />\n";
echo $decompressed_file;

?>
```


See Also

- [bzwrite\(\)](#)
- [feof\(\)](#)
- [bzopen\(\)](#)

bzwrite

bzwrite -- Binary safe bzip2 file write

Description

int **bzwrite** (resource \$bz, string \$data [, int \$length])

[bzwrite\(\)](#) writes a string into the given bzip2 file stream.

Parameters

bz

The file pointer. It must be valid and must point to a file successfully opened by [bzopen\(\)](#).

data

The written data.

length

If supplied, writing will stop after *length* (uncompressed) bytes have been written or the end of *data* is reached, whichever comes first.

Return Values

Returns the number of bytes written, or **FALSE** on error.

Examples

Example #7 - [bzwrite\(\)](#) example

```
<?php
$str = "uncompressed data";
$bz = bzopen("/tmp/foo.bz2", "w");
bzwrite($bz, $str, strlen($str));
bzclose($bz);
?>
```

See Also

- [bzread\(\)](#)

- [bzopen\(\)](#)