



**Full credit is given to the above companies including the Operating System (OS) that this PDF file was generated!**

***Rocky Enterprise Linux 9.2 Manual Pages on command 'GDBM\_File.3perl'***

***\$ man GDBM\_File.3perl***

GDBM\_File(3perl) Perl Programmers Reference Guide GDBM\_File(3perl)

NAME

GDBM\_File - Perl5 access to the gdbm library.

SYNOPSIS

```
use GDBM_File;

[$db =] tie %hash, 'GDBM_File', $filename, &GDBM_WRCREAT, 0640;

# Use the %hash array.

$e = $db->errno;

$e = $db->syserrno;

$str = $db->strerror;

$bool = $db->needs_recovery;

$db->clear_error;

$db->reorganize;

$db->sync;

$n = $db->count;

$n = $db->flags;

$str = $db->dbname;

$db->cache_size;

$db->cache_size($newsz);

$n = $db->block_size;

$bool = $db->sync_mode;

$db->sync_mode($bool);

$bool = $db->centfree;
```

```

$db->centfree($bool);

$bool = $db->coalesce;

$db->coalesce($bool);

$bool = $db->mmap;

$size = $db->mmapsize;

$db->mmapsize($newszie);

$db->recover(%args);

untie %hash ;

```

## DESCRIPTION

GDBM\_File is a module which allows Perl programs to make use of the facilities provided by the GNU gdbm library. If you intend to use this module you should really have a copy of the gdbm manualpage at hand.

Most of the libgdbm.a functions are available through the GDBM\_File interface.

Unlike Perl's built-in hashes, it is not safe to "delete" the current item from a

GDBM\_File tied hash while iterating over it with "each". This is a limitation of the gdbm library.

## STATIC METHODS

### GDBM\_version

```
$str = GDBM_File->GDBM_version;
```

```
@ar = GDBM_File->GDBM_version;
```

Returns the version number of the underlying libgdbm library. In scalar context, returns the library version formatted as string:

```
MINOR.MAJOR[.PATCH][ (GUESS)]
```

where MINOR, MAJOR, and PATCH are version numbers, and GUESS is a guess level (see below).

In list context, returns a list:

```
( MINOR, MAJOR, PATCH [, GUESS] )
```

The GUESS component is present only if libgdbm version is 1.8.3 or earlier. This is because earlier releases of libgdbm did not include information about their version and the GDBM\_File module has to implement certain guesswork in order to determine it. GUESS is a textual description in string context, and a positive number indicating how rough the guess is in list context. Possible values are:

1 - exact guess

The major and minor version numbers are guaranteed to be correct. The actual

patchlevel is most probably guessed right, but can be 1-2 less than indicated.

2 - approximate

The major and minor number are guaranteed to be correct. The patchlevel is set to the upper bound.

3 - rough guess

The version is guaranteed to be not newer than MAJOR.MINOR.

## METHODS

close

```
$db->close;
```

Closes the database. You are not advised to use this method directly. Please, use `unite` instead.

errno

```
$db->errno
```

Returns the last error status associated with this database.

syserrno

```
$db->syserrno
```

Returns the last system error status (C "errno" variable), associated with this database,

strerror

```
$db->strerror
```

Returns textual description of the last error that occurred in this database.

clear\_error

```
$db->clear_error
```

Clear error status.

needs\_recovery

```
$db->needs_recovery
```

Returns true if the database needs recovery.

reorganize

```
$db->reorganize;
```

Reorganizes the database.

sync

```
$db->sync;
```

Synchronizes recent changes to the database with its disk copy.

count

```
$n = $db->count;
```

Returns number of keys in the database.

flags

```
$db->flags;
```

Returns flags passed as 4th argument to tie.

dbname

```
$db->dbname;
```

Returns the database name (i.e. 3rd argument to tie).

cache\_size

```
$db->cache_size;
```

```
$db->cache_size($newsiz);
```

Returns the size of the internal GDBM cache for that database.

Called with argument, sets the size to \$newsiz.

block\_size

```
$db->block_size;
```

Returns the block size of the database.

sync\_mode

```
$db->sync_mode;
```

```
$db->sync_mode($bool);
```

Returns the status of the automatic synchronization mode. Called with argument, enables or disables the sync mode, depending on whether \$bool is true or false.

When synchronization mode is on (true), any changes to the database are immediately written to the disk. This ensures database consistency in case of any unforeseen errors (e.g. power failures), at the expense of considerable slowdown of operation.

Synchronization mode is off by default.

centfree

```
$db->centfree;
```

```
$db->centfree($bool);
```

Returns status of the central free block pool (0 - disabled, 1 - enabled).

With argument, changes its status.

By default, central free block pool is disabled.

coalesce

```
$db->coalesce;
```

```
$db->coalesce($bool);
```

mmap

```
$db->mmap;
```

Returns true if memory mapping is enabled.

This method will croak if the libgdbm library is compiled without memory mapping support.

mmapsize

```
$db->mmapsize;
```

```
$db->mmapsize($newsiz);
```

If memory mapping is enabled, returns the size of memory mapping. With argument, sets the size to \$newsiz.

This method will croak if the libgdbm library is compiled without memory mapping support.

recover

```
$db->recover(%args);
```

Recovers data from a failed database. %args is optional and can contain following keys:

err => sub { ... }

Reference to code for detailed error reporting. Upon encountering an error, recover will call this sub with a single argument - a description of the error.

backup => \sstr

Creates a backup copy of the database before recovery and returns its filename in \$str.

max\_failed\_keys => \$n

Maximum allowed number of failed keys. If the actual number becomes equal to \$n, recover aborts and returns error.

max\_failed\_buckets => \$n

Maximum allowed number of failed buckets. If the actual number becomes equal to \$n, recover aborts and returns error.

max\_failures => \$n

Maximum allowed number of failures during recovery.

stat => \%hash

Return recovery statistics in %hash. Upon return, the following keys will be present:

recovered\_keys

Number of successfully recovered keys.

recovered\_buckets

Number of successfully recovered buckets.

failed\_keys

Number of keys that failed to be retrieved.

failed\_buckets

Number of buckets that failed to be retrieved.

## AVAILABILITY

gdbm is available from any GNU archive. The master site is "ftp.gnu.org", but you are strongly urged to use one of the many mirrors. You can obtain a list of mirror sites from <http://www.gnu.org/order/ftp.html>.

## SECURITY AND PORTABILITY

Do not accept GDBM files from untrusted sources.

GDBM files are not portable across platforms.

The GDBM documentation doesn't imply that files from untrusted sources can be safely used with "libgdbm".

A maliciously crafted file might cause perl to crash or even expose a security vulnerability.

## SEE ALSO

perl(1), DB\_File(3), perldbfilter, gdbm(3),

<https://www.gnu.org.ua/software/gdbm/manual.html>.

perl v5.34.0

2023-11-23

GDBM\_File(3perl)