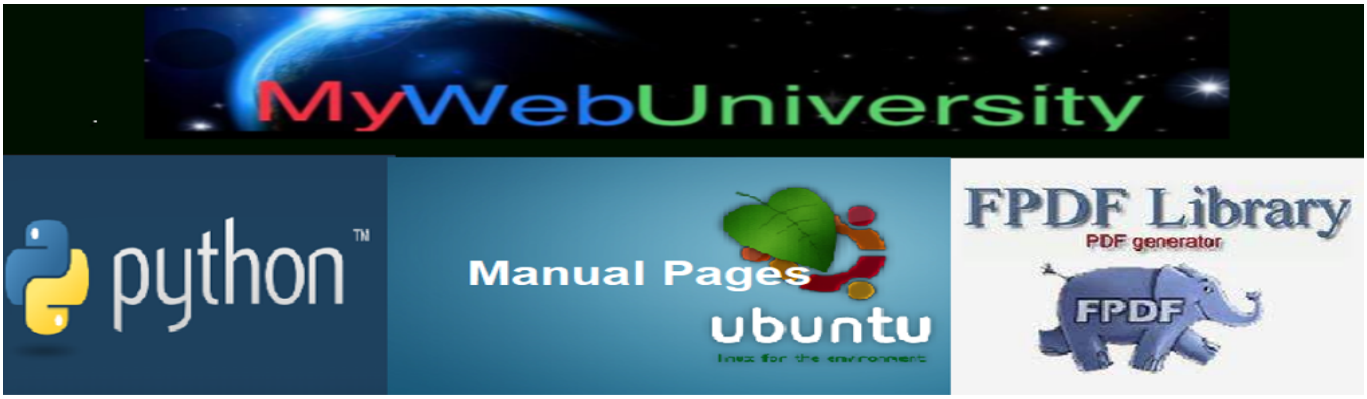

Rocky Enterprise Linux 9.2 Manual Pages on command 'malloc_set_state.3'

$ man malloc_set_state.3

MALLOC_GET_STATE(3) Linux Programmer's Manual MALLOC_GET_STATE(3)

NAME

malloc_get_state, malloc_set_state - record and restore state of malloc implementation

SYNOPSIS

#include <malloc.h>

void *malloc_get_state(void);

int malloc_set_state(void *state);

DESCRIPTION

Note: these function are removed in glibc version 2.25.

The malloc_get_state() function records the current state of all malloc(3) internal book? keeping variables (but not the actual contents of the heap or the state of malloc_hook(3) functions pointers). The state is recorded in a system-dependent opaque data structure dynamically allocated via malloc(3), and a pointer to that data structure is returned as the function result. (It is the caller's responsibility to free(3) this memory.)

The malloc_set_state() function restores the state of all malloc(3) internal bookkeeping variables to the values recorded in the opaque data structure pointed to by state.

RETURN VALUE

On success, malloc_get_state() returns a pointer to a newly allocated opaque data struc? ture. On error (for example, memory could not be allocated for the data structure), mal? loc_get_state() returns NULL.

On success, malloc_set_state() returns 0. If the implementation detects that state does not point to a correctly formed data structure, malloc_set_state() returns -1. If the im? plementation detects that the version of the data structure referred to by state is a more

recent version than this implementation knows about, malloc_set_state() returns -2.

ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

Interface	Attribute	Value
malloc_get_state(),	Thread safety	MT-Safe
malloc_set_state()		

CONFORMING TO

These functions are GNU extensions.

NOTES

These functions are useful when using this malloc(3) implementation as part of a shared library, and the heap contents are saved/restored via some other method. This technique is used by GNU Emacs to implement its "dumping" function.

Hook function pointers are never saved or restored by these functions, with two exceptions: if malloc checking (see mallopt(3)) was in use when malloc_get_state() was called, then malloc_set_state() resets malloc checking hooks if possible; if malloc checking was not in use in the recorded state, but the caller has requested malloc checking, then the hooks are reset to 0.

SEE ALSO

malloc(3), mallopt(3)

COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at https://www.kernel.org/doc/man-pages/.