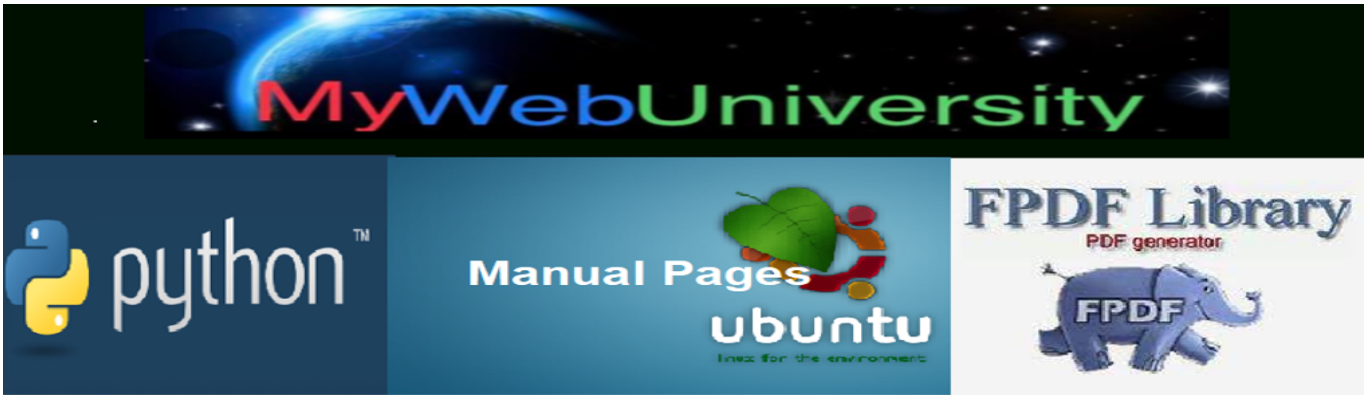

Rocky Enterprise Linux 9.2 Manual Pages on command 'mincore.2'

$ man mincore.2

MINCORE(2) Linux Programmer's Manual MINCORE(2)

NAME

mincore - determine whether pages are resident in memory

SYNOPSIS

#include <unistd.h>

#include <sys/mman.h>

int mincore(void *addr, size_t length, unsigned char *vec);

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

mincore():

Since glibc 2.19:

_DEFAULT_SOURCE

Glibc 2.19 and earlier:

_BSD_SOURCE || _SVID_SOURCE

DESCRIPTION

mincore() returns a vector that indicates whether pages of the calling process's virtual memory are resident in core (RAM), and so will not cause a disk access (page fault) if referenced. The kernel returns residency information about the pages starting at the ad? dress addr, and continuing for length bytes.

The addr argument must be a multiple of the system page size. The length argument need not be a multiple of the page size, but since residency information is returned for whole pages, length is effectively rounded up to the next multiple of the page size. One may obtain the page size (PAGE_SIZE) using sysconf(_SC_PAGESIZE).

The vec argument must point to an array containing at least (length+PAGE_SIZE-1) /

PAGE_SIZE bytes. On return, the least significant bit of each byte will be set if the corresponding page is currently resident in memory, and be clear otherwise. (The settings of the other bits in each byte are undefined; these bits are reserved for possible later use.) Of course the information returned in vec is only a snapshot: pages that are not locked in memory can come and go at any moment, and the contents of vec may already be stale by the time this call returns.

RETURN VALUE

On success, mincore() returns zero. On error, -1 is returned, and errno is set appropri? ately.

ERRORS

EAGAIN kernel is temporarily out of resources.

EFAULT vec points to an invalid address.

EINVAL addr is not a multiple of the page size.

ENOMEM length is greater than (TASK_SIZE - addr). (This could occur if a negative value is specified for length, since that value will be interpreted as a large unsigned integer.) In Linux 2.6.11 and earlier, the error EINVAL was returned for this con? dition.

ENOMEM addr to addr + length contained unmapped memory.

VERSIONS

Available since Linux 2.3.99pre1 and glibc 2.2.

CONFORMING TO

mincore() is not specified in POSIX.1, and it is not available on all UNIX implementa? tions.

BUGS

Before kernel 2.6.21, mincore() did not return correct information for MAP_PRIVATE map? pings, or for nonlinear mappings (established using remap_file_pages(2)).

SEE ALSO

fincore(1), madvise(2), mlock(2), mmap(2), posix_fadvise(2), posix_madvise(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/.