



## ***Rocky Enterprise Linux 9.2 Manual Pages on command 'mmap2.2'***

**C:\>man mmap2.2**

MMAP2(2)                      Linux Programmer's Manual                      MMAP2(2)

### NAME

mmap2 - map files or devices into memory

### SYNOPSIS

```
#include <sys/mman.h>

void *mmap2(void *addr, size_t length, int prot,
            int flags, int fd, off_t pgoffset);
```

### DESCRIPTION

This is probably not the system call that you are interested in; instead, see `mmap(2)`, which describes the glibc wrapper function that invokes this system call. The `mmap2()` system call provides the same interface as `mmap(2)`, except that the final argument specifies the offset into the file in 4096-byte units (instead of bytes, as is done by `mmap(2)`). This enables applications that use a 32-bit `off_t` to map large files (up to  $2^{44}$  bytes).

### RETURN VALUE

On success, `mmap2()` returns a pointer to the mapped area. On error, -1 is returned and `errno` is set appropriately.

### ERRORS

**EFAULT** Problem with getting the data from user space.

**EINVAL** (Various platforms where the page size is not 4096 bytes.) `offset * 4096` is not a multiple of the system page size.

`mmap2()` can also return any of the errors described in `mmap(2)`.

## VERSIONS

mmap2() is available since Linux 2.3.31.

## CONFORMING TO

This system call is Linux-specific.

## NOTES

On architectures where this system call is present, the glibc mmap() wrapper function invokes this system call rather than the mmap(2) system call.

This system call does not exist on x86-64.

On ia64, the unit for offset is actually the system page size, rather than 4096 bytes.

## SEE ALSO

getpagesize(2), mmap(2), mremap(2), msync(2), shm\_open(3)

## COLOPHON

This page is part of release 5.05 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/>.