



Linux Ubuntu 26.04 Manual Pages on command 'mmap2.2'

\$ man mmap2.2

mmap2(2) System Calls Manual mmap2(2)

NAME

mmap2 - map files or devices into memory

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <sys/mman.h> /* Definition of MAP_* and PROT_* constants */
#include <sys/syscall.h> /* Definition of SYS_* constants */
#include <unistd.h>

void *syscall(SYS_mmap2, unsigned long addr, unsigned long length,
              unsigned long prot, unsigned long flags,
              unsigned long fd, unsigned long 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 2⁴⁴ bytes).

RETURN VALUE

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

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

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.

STANDARDS

Linux.

HISTORY

Linux 2.3.31.

SEE ALSO

getpagesize(2), mmap(2), mremap(2), msync(2), shm_open(3)

Linux man-pages 6.17

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