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

$ man getpagesize.2

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

NAME

    getpagesize - get memory page size

SYNOPSIS

    #include <unistd.h>

    int getpagesize(void);

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

    getpagesize():

        Since glibc 2.19:

            _DEFAULT_SOURCE || ! (_POSIX_C_SOURCE >= 200112L)

        From glibc 2.12 to 2.19:

            _BSD_SOURCE || ! (_POSIX_C_SOURCE >= 200112L)

        Before glibc 2.12:

            _BSD_SOURCE || _XOPEN_SOURCE >= 500

DESCRIPTION

    The function getpagesize() returns the number of bytes in a memory page, where "page" is a

    fixed-length block, the unit for memory allocation and file mapping performed by mmap(2).

CONFORMING TO

    SVr4, 4.4BSD, SUSv2. In SUSv2 the getpagesize() call is labeled LEGACY, and in

    POSIX.1-2001 it has been dropped; HP-UX does not have this call.

NOTES

    Portable applications should employ sysconf(_SC_PAGESIZE) instead of getpagesize():

        #include <unistd.h>

```
long sz = sysconf(_SC_PAGESIZE);
```

(Most systems allow the synonym _SC_PAGE_SIZE for _SC_PAGESIZE.)

Whether getpagesize() is present as a Linux system call depends on the architecture. If it is, it returns the kernel symbol PAGE_SIZE, whose value depends on the architecture and machine model. Generally, one uses binaries that are dependent on the architecture but not on the machine model, in order to have a single binary distribution per architecture. This means that a user program should not find PAGE_SIZE at compile time from a header file, but use an actual system call, at least for those architectures (like sun4) where this dependency exists. Here glibc 2.0 fails because its getpagesize() returns a stati‐ cally derived value, and does not use a system call. Things are OK in glibc 2.1.

SEE ALSO

mmap(2), sysconf(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/.