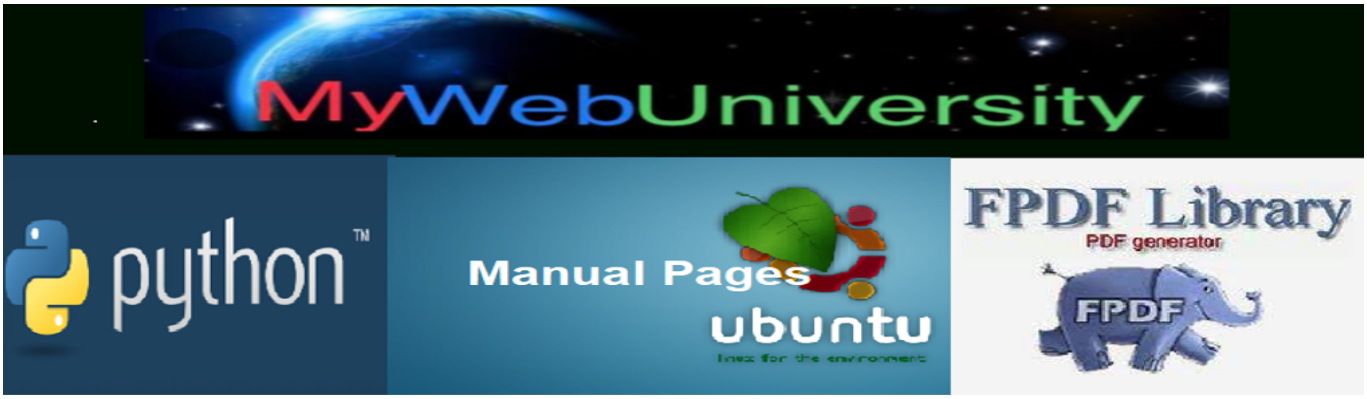

Rocky Enterprise Linux 9.2 Manual Pages on command 'getentropy.3'

$ man getentropy.3

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

NAME

getentropy - fill a buffer with random bytes

SYNOPSIS

#include <unistd.h>

int getentropy(void *buffer, size_t length);

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

getentropy():

_DEFAULT_SOURCE

DESCRIPTION

The getentropy() function writes length bytes of high-quality random data to the buffer starting at the location pointed to by buffer. The maximum permitted value for the length argument is 256.

A successful call to getentropy() always provides the requested number of bytes of en? tropy.

RETURN VALUE

On success, this function returns zero. On error, -1 is returned, and errno is set appro? priately.

ERRORS

EFAULT Part or all of the buffer specified by buffer and length is not in valid address? able memory.

EIO length is greater than 256.

EIO An unspecified error occurred while trying to overwrite buffer with random data.

ENOSYS This kernel version does not implement the getrandom(2) system call required to im?
plement this function.

VERSIONS

The getentropy() function first appeared in glibc 2.25.

CONFORMING TO

This function is nonstandard. It is also present on OpenBSD.

NOTES

The getentropy() function is implemented using getrandom(2).

Whereas the glibc wrapper makes getrandom(2) a cancellation point, getentropy() is not a cancellation point.

getentropy() is also declared in <sys/random.h>. (No feature test macro need be defined to obtain the declaration from that header file.)

A call to getentropy() may block if the system has just booted and the kernel has not yet collected enough randomness to initialize the entropy pool. In this case, getentropy() will keep blocking even if a signal is handled, and will return only once the entropy pool has been initialized.

SEE ALSO

getrandom(2), urandom(4), random(7)

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/.