Red Hat Enterprise Linux Release 9.2 Manual Pages on 'epoll_create.2' command

$ man epoll_create.2

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

NAME

    epoll_create, epoll_create1 - open an epoll file descriptor

SYNOPSIS

    #include <sys/epoll.h>

    int epoll_create(int size);

    int epoll_create1(int flags);

DESCRIPTION

    epoll_create() creates a new epoll(7) instance. Since Linux 2.6.8, the

    size argument is ignored, but must be greater than zero; see NOTES.

    epoll_create() returns a file descriptor referring to the new epoll in?

    stance.   This file descriptor is used for all the subsequent calls to

    the epoll interface. When no longer required, the file descriptor re?

    turned by epoll_create() should be closed by using close(2). When all

    file descriptors referring to an epoll instance have been closed, the

    kernel destroys the instance and releases the associated resources for

    reuse.

  epoll_create1()

    If flags is 0, then, other than the fact that the obsolete size argu?

    ment is dropped, epoll_create1() is the same as epoll_create(). The

    following value can be included in flags to obtain different behavior:

    EPOLL_CLOEXEC

        Set the close-on-exec (FD_CLOEXEC) flag on the new file descrip?

tor.   See the description of the O_CLOEXEC flag in open(2) for
reasons why this may be useful.

RETURN VALUE

On success, these system calls return a file descriptor (a nonnegative
integer).   On error, -1 is returned, and errno is set to indicate the
error.

ERRORS

EINVAL size is not positive.

EINVAL (epoll_create1()) Invalid value specified in flags.

EMFILE The per-user limit on the number of epoll instances imposed by
/proc/sys/fs/epoll/max_user_instances   was   encountered.   See
epoll(7) for further details.

EMFILE The per-process limit on the number of open file descriptors has
been reached.

ENFILE The system-wide limit on the total number of open files has been
reached.

ENOMEM There was insufficient memory to create the kernel object.

VERSIONS

epoll_create() was added to the kernel in version 2.6. Library support
is provided in glibc starting with version 2.3.2.

epoll_create1() was added to the kernel in version 2.6.27. Library
support is provided in glibc starting with version 2.9.

CONFORMING TO

epoll_create() is Linux-specific.

NOTES

In the initial epoll_create() implementation, the size argument in?
formed the kernel of the number of file descriptors that the caller ex?
pected to add to the epoll instance. The kernel used this information
as a hint for the amount of space to initially allocate in internal
data structures describing events. (If necessary, the kernel would al?
locate more space if the caller's usage exceeded the hint given in
size.) Nowadays, this hint is no longer required (the kernel dynami?
cally sizes the required data structures without needing the hint), but

size must still be greater than zero, in order to ensure backward com?

patibility when new epoll applications are run on older kernels.

SEE ALSO

close(2), epoll_ctl(2), epoll_wait(2), epoll(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/.

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