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 an **epoll**(7) instance. Since Linux 2.6.8, the *size* argument is ignored, but must be greater than zero; see NOTES below.

epoll_create() returns a file descriptor referring to the new epoll instance. This file descriptor is used for all the subsequent calls to the **epoll** interface. When no longer required, the file descriptor returned 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* argument 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 descriptor. 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 nonnegative file descriptor. 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.

ENFILE
The system 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 informed the kernel of the number of file descriptors that the caller expected 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 allocate more space if the caller's usage exceeded the hint given in *size*.) Nowadays, this hint is no longer required (the kernel dynamically sizes the required data structures without needing the hint), but *size* must still be greater than zero, in order to ensure backward compatibility 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 3.44 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at http://www.kernel.org/doc/man-pages/.