

NAME

sigprocmask - manipulate current signal mask

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

```
#include <signal.h>
```

int

```
sigprocmask(int how, const sigset_t * restrict set, sigset_t * restrict oset);
```

DESCRIPTION

The **sigprocmask()** system call examines and/or changes the current signal mask (those signals that are blocked from delivery). Signals are blocked if they are members of the current signal mask set.

If *set* is not null, the action of **sigprocmask()** depends on the value of the *how* argument. The signal mask is changed as a function of the specified *set* and the current mask. The function is specified by *how* using one of the following values from *<signal.h>*:

SIG_BLOCK The new mask is the union of the current mask and the specified *set*.

SIG_UNBLOCK The new mask is the intersection of the current mask and the complement of the specified *set*.

SIG_SETMASK The current mask is replaced by the specified *set*.

If *oset* is not null, it is set to the previous value of the signal mask. When *set* is null, the value of *how* is insignificant and the mask remains unset providing a way to examine the signal mask without modification.

The system quietly disallows SIGKILL or SIGSTOP to be blocked.

In threaded applications, pthread_sigmask(3) must be used instead of **sigprocmask()**.

RETURN VALUES

The **sigprocmask()** function returns the value 0 if successful; otherwise the value -1 is returned and the global variable *errno* is set to indicate the error.

ERRORS

The **sigprocmask()** system call will fail and the signal mask will be unchanged if one of the following occurs:

[EINVAL] The *how* argument has a value other than those listed here.

SEE ALSO

kill(2), sigaction(2), sigpending(2), sigsuspend(2), fpsetmask(3), pthread_sigmask(3), sigsetops(3)

STANDARDS

The **sigprocmask()** system call is expected to conform to IEEE Std 1003.1-1990 ("POSIX.1").