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

$ man sighold.3

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

NAME

    sigset, sighold, sigrelse, sigignore - System V signal API

SYNOPSIS

    #include <signal.h>

    typedef void (*sighandler_t)(int);

    sighandler_t sigset(int sig, sighandler_t disp);

    int sighold(int sig);

    int sigrelse(int sig);

    int sigignore(int sig);

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

    sigset(), sighold(), sigrelse(), sigignore():

      _XOPEN_SOURCE >= 500

DESCRIPTION

    These functions are provided in glibc as a compatibility interface for programs that make

    use of the historical System V signal API. This API is obsolete: new applications should

    use the POSIX signal API (sigaction(2), sigprocmask(2), etc.)

    The sigset() function modifies the disposition of the signal sig. The disp argument can

    be the address of a signal handler function, or one of the following constants:

    SIG_DFL

      Reset the disposition of sig to the default.

    SIG_IGN

      Ignore sig.

SIG_HOLD

Add sig to the process's signal mask, but leave the disposition of sig unchanged.

If disp specifies the address of a signal handler, then sig is added to the process's sig‐

nal mask during execution of the handler.

If disp was specified as a value other than SIG_HOLD, then sig is removed from the

process's signal mask.

The dispositions for SIGKILL and SIGSTOP cannot be changed.

The sighold() function adds sig to the calling process's signal mask.

The sigrelse() function removes sig from the calling process's signal mask.

The sigignore() function sets the disposition of sig to SIG_IGN.

RETURN VALUE

On success, sigset() returns SIG_HOLD if sig was blocked before the call, or the signal's

previous disposition if it was not blocked before the call. On error, sigset() returns

-1, with errno set to indicate the error. (But see BUGS below.)

The sighold(), sigrelse(), and sigignore() functions return 0 on success; on error, these

functions return -1 and set errno to indicate the error.

ERRORS

For sigset() see the ERRORS under sigaction(2) and sigprocmask(2).

For sighold() and sigrelse() see the ERRORS under sigprocmask(2).

For sigignore(), see the errors under sigaction(2).

ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

???
?Interface   ? Attribute   ? Value   ?
???
?sigset(), sighold(),   ? Thread safety ? MT-Safe ?
?sigrelse(), sigignore() ?   ?   ?
???

CONFORMING TO

SVr4, POSIX.1-2001, POSIX.1-2008. These functions are obsolete: do not use them in new

programs. POSIX.1-2008 marks sighold(), sigignore(), sigpause(3), sigrelse(), and

sigset() as obsolete, recommending the use of sigaction(2), sigprocmask(2), pthread_sig‐

mask(3), and sigsuspend(2) instead.

NOTES

These functions appeared in glibc version 2.1.

The sighandler_t type is a GNU extension; it is used on this page only to make the sigset() prototype more easily readable.

The sigset() function provides reliable signal handling semantics (as when calling sigac‐tion(2) with sa_mask equal to 0).

On System V, the signal() function provides unreliable semantics (as when calling sigac‐tion(2) with sa_mask equal to SA_RESETHAND | SA_NODEFER). On BSD, signal() provides reli‐able semantics. POSIX.1-2001 leaves these aspects of signal() unspecified. See signal(2) for further details.

In order to wait for a signal, BSD and System V both provided a function named sig‐pause(3), but this function has a different argument on the two systems. See sigpause(3) for details.

BUGS

In versions of glibc before 2.2, sigset() did not unblock sig if disp was specified as a value other than SIG_HOLD.

In versions of glibc before 2.5, sigset() does not correctly return the previous disposi‐tion of the signal in two cases. First, if disp is specified as SIG_HOLD, then a success‐ful sigset() always returns SIG_HOLD. Instead, it should return the previous disposition of the signal (unless the signal was blocked, in which case SIG_HOLD should be returned). Second, if the signal is currently blocked, then the return value of a successful sigset() should be SIG_HOLD. Instead, the previous disposition of the signal is returned. These problems have been fixed since glibc 2.5.

SEE ALSO

kill(2), pause(2), sigaction(2), signal(2), sigprocmask(2), raise(3), sigpause(3), sigvec(3), signal(7)

COLOPHON

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