Rocky Enterprise Linux 9.2 Manual Pages on command 'wait3.2'

$ man wait3.2

```
WAIT4(2)                    Linux Programmer's Manual                   WAIT4(2)

NAME

       wait3, wait4 - wait for process to change state, BSD style

SYNOPSIS

       #include <sys/types.h>

       #include <sys/time.h>

       #include <sys/resource.h>

       #include <sys/wait.h>

       pid_t wait3(int *wstatus, int options,

                   struct rusage *rusage);

       pid_t wait4(pid_t pid, int *wstatus, int options,

                   struct rusage *rusage);

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

       wait3():

           Since glibc 2.26:

               _DEFAULT_SOURCE ||

               (_XOPEN_SOURCE >= 500 &&

                   ! (_POSIX_C_SOURCE >= 200112L || _XOPEN_SOURCE >= 600))

           From glibc 2.19 to 2.25:

               _DEFAULT_SOURCE || _XOPEN_SOURCE >= 500

           Glibc 2.19 and earlier:

               _BSD_SOURCE || _XOPEN_SOURCE >= 500

       wait4():
```

Since glibc 2.19:

_DEFAULT_SOURCE

Glibc 2.19 and earlier:

_BSD_SOURCE

DESCRIPTION

These functions are nonstandard; in new programs, the use of waitpid(2) or waitid(2) is preferable.

The wait3() and wait4() system calls are similar to waitpid(2), but additionally return resource usage information about the child in the structure pointed to by rusage.

Other than the use of the rusage argument, the following wait3() call:

```
wait3(wstatus, options, rusage);
```

is equivalent to:

```
waitpid(-1, wstatus, options);
```

Similarly, the following wait4() call:

```
wait4(pid, wstatus, options, rusage);
```

is equivalent to:

```
waitpid(pid, wstatus, options);
```

In other words, wait3() waits of any child, while wait4() can be used to select a specific child, or children, on which to wait. See wait(2) for further details.

If rusage is not NULL, the struct rusage to which it points will be filled with accounting information about the child. See getrusage(2) for details.

RETURN VALUE

As for waitpid(2).

ERRORS

As for waitpid(2).

CONFORMING TO

4.3BSD.

SUSv1 included a specification of wait3(); SUSv2 included wait3(), but marked it LEGACY; SUSv3 removed it.

NOTES

Including <sys/time.h> is not required these days, but increases portability. (Indeed, <sys/resource.h> defines the rusage structure with fields of type struct timeval defined in <sys/time.h>.)

C library/kernel differences

On Linux, wait3() is a library function implemented on top of the wait4() system call.

SEE ALSO

fork(2), getrusage(2), sigaction(2), signal(2), wait(2), signal(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/.