The Open Group Base Specifications Issue 7, 2018 edition IEEE Std 1003.1-2017 (Revision of IEEE Std 1003.1-2008) Copyright © 2001-2018 IEEE and The Open Group

## NAME

sys/wait.h - declarations for waiting

#### **SYNOPSIS**

#include <sys/wait.h>

# **DESCRIPTION**

The <sys/wait.h> header shall define the following symbolic constants for use with waitpid():

WCONTINUED

 $[\underline{\text{XSI}}]$  oxdot Report status of continued child process. oxdot

WNOHANG

Do not hang if no status is available; return immediately.

WUNTRACED

Report status of stopped child process.

The <sys/wait.h> header shall define the following macros for analysis of process status values:

WEXITSTATUS

Return exit status.

WIFCONTINUED

 $[\underline{\text{XSI}}] \boxtimes \text{True if child has been continued.} \boxtimes$ 

WIFEXITED

True if child exited normally.

WIFSIGNALED

True if child exited due to uncaught signal.

WIFSTOPPED

True if child is currently stopped.

WSTOPSIG

Return signal number that caused process to stop.

WTERMSIG

Return signal number that caused process to terminate.

The <sys/wait.h> header shall define the following symbolic constants as possible values for the options argument to waitid():

WEXITED

Wait for processes that have exited.

WNOWAIT

Keep the process whose status is returned in infop in a waitable state.

WSTOPPED

Status is returned for any child that has stopped upon receipt of a signal.

The  $[XSI] \boxtimes WCONTINUED \boxtimes and WNOHANG constants, described above for <math>waitpid()$ , can also be used with waitid().

The type **idtype\_t** shall be defined as an enumeration type whose possible values shall include at least the following: P\_ALL P\_PGID P\_PID

The <sys/wait.h> header shall define the id\_t and pid\_t types as described in <sys/types.h>.

The <sys/wait.h> header shall define the **siginfo\_t** type and the **sigval** union as described in <signal.h>.

06.05.2022, 08:26 <sys/wait.h>

Inclusion of the <sys/wait.h> header may also make visible all symbols from <signal.h>.

The following shall be declared as functions and may also be defined as macros. Function prototypes shall be provided.

```
pid_t wait(int *);
int waitid(idtype_t, id_t, siginfo_t *, int);
pid_t waitpid(pid_t, int *, int);
```

The following sections are informative.

#### APPLICATION USAGE

None.

## **RATIONALE**

None.

## **FUTURE DIRECTIONS**

None.

## SEE ALSO

```
<signal.h>, <sys/resource.h>, <sys/types.h>
XSH wait, waitid
```

## **CHANGE HISTORY**

First released in Issue 3.

Included for alignment with the POSIX.1-1988 standard.

## Issue 6

The wait3() function is removed.

## Issue 7

The <u>waitid()</u> function and symbolic constants for its *options* argument are moved to the Base.

The description of the WNOHANG constant is clarified.

The requirement for <sys/wait.h> to define the **rusage** structure as described in <<u>sys/resource.h></u> is removed, and <sys/wait.h> is no longer allowed to make visible all symbols from <<u>sys/resource.h></u>.

POSIX.1-2008, Technical Corrigendum 2, XBD/TC2-2008/0082 [579] and XBD/TC2-2008/0083 [564] are applied.

End of informative text.

return to top of page

06.05.2022, 08:26 <sys/wait.h>

UNIX ® is a registered Trademark of The Open Group.

POSIX ™ is a Trademark of The IEEE.

Copyright © 2001-2018 IEEE and The Open Group, All Rights Reserved

[ Main Index | XBD | XSH | XCU | XRAT ]

<<< Previous Home Next >>>