

NAME

pwait - wait for processes to terminate

SYNOPSIS

pwait [-t *duration*] [-ov] *pid* ...

DESCRIPTION

The **pwait** utility will wait until each of the given processes has terminated.

The following option is available:

-o Exit when any of the given processes has terminated.

-t *duration*

If any process is still running after *duration*, **pwait** will exit. The *duration* value can be integer or decimal numbers. Values without unit symbols are interpreted as seconds.

Supported unit symbols are:

s seconds

m minutes

h hours

-v Print the exit status when each process terminates or ‘timeout’ if the timer goes off earlier.

EXIT STATUS

The **pwait** utility exits 0 on success, and >0 if an error occurs.

If the **-t** flag is specified and a timeout occurs, the exit status will be 124.

Invalid pids elicit a warning message but are otherwise ignored.

EXAMPLES

Start two `sleep(1)` processes in the background. The first one will sleep for 30 seconds and the second one for one hour. Wait for any of them to finish but no more than 5 seconds. Since a timeout occurs the exit status is 124:

```
$ sleep 30 & sleep 3600 &
[1] 1646
[2] 1647
$ pwait -o -t5 1646 1647
```

```
$?  
124
```

Same as above but try to obtain the exit status of the processes. In this case 'timeout' is shown and the exit status is 124:

```
$ sleep 30 & sleep 3600 &  
[1] 1652  
[2] 1653  
$ pwait -v -t 5 1652 1653  
timeout  
$?  
124
```

Start two sleep(1) processes in the background sleeping for 30 and 40 seconds respectively. Wait 60 seconds for any of them to finish and get their exit codes:

```
$ sleep 30 & sleep 40 &  
[1] 1674  
[2] 1675  
$ pwait -v -t 60 1674 1675  
1674: exited with status 0.  
1675: exited with status 0.  
[1]- Done          sleep 30  
[2]+ Done          sleep 40  
$ echo $?  
0
```

SEE ALSO

kill(1), pkill(1), ps(1), wait(1), kqueue(2)

NOTES

pwait is not a substitute for the wait(1) builtin as it will not clean up any zombies or state in the parent process.

To avoid deadlock, **pwait** will ignore its own pid, if it is provided as a process id to wait for.

HISTORY

A **pwait** command first appeared in SunOS 5.8.