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QWAIT(f)

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NAME

qwait - check for child process termination

SYNOPSIS

(qwait = 80.; not in assembler) sys qwait (process ID in r0) (status in r1)

pid = qwait(status)
int *status;
int pid;

DESCRIPTION

Qwait checks for the termination of one of its child processes. If any child has died since the last wait or qwait, a valid return is generated; if there are no children, return is immediate with the error bit set (resp. with a value of -1 returned). The normal return yields the process ID of the terminated child (in r0). A value of zero is returned for the process ID if no child process has terminated. In the case of several children several qwait calls are needed to learn of all the deaths.

If no error is indicated on return, the r1 high byte (resp. the high byte stored into *status*) contains the low byte of the child process r0 (resp. the argument of *exit*) when it terminated. The r1 (resp. *status*) low byte contains the termination status of the process. See signal (II) for a list of termination statuses (signals); 0 status indicates normal termination. If the 0200 bit of the termination status is set, a core image of the process was produced by the system.

If the parent process terminates without waiting on its children, the termination message is lost.

This system call differs from *wait* in that the calling process does not delay waiting for process termination.

SEE ALSO

exit (II), fork (II), signal (II), wait (II).

DIAGNOSTICS

The error bit (c-bit) is set if there are no children not previously waited for. From C, a returned value of -1 indicates an error.